# The Builder.

Vol. XXXIV. No. 1742. Saturday, June 24, 1876.


## ILLUSTRATIONS.


London Street Architecture: Queen Anne Chambers, Poultry.—Messrs. Belcher, Architects ..... 614
New Hotel and Shops, Newcastle-on-Tyne (Plan, 617).—Mr. J. E. Watson, Architect ..... 615


## CONTENTS.


"Utility and Progress" in Architecture ..... 603
"Architectural Styles" ..... 605
Opening of the New Victoria Baths at Peckham ..... 606
Pictures by the late L. R. Mignot ..... 607
General Conference of Architects ..... 607
Greek Art ..... 610
Dwellings in Flats for the Middle and Labouring Classes ..... 612
London Street Architecture ..... 612
Sir Gilbert Scott on Westminster Abbey ..... 617
New Hotel and Shops opposite to the Central Railway Station, Newcastle-on-Tyne ..... 613
The Institute Conference Dinner ..... 618
The Importance of Greek Art and Literature to the Practice of Gothic Architecture, by Mr. William Burges ..... 619
An Historical Sketch of the Royal Institute of British Architects, by Mr. Charles L. Eastlake, Secretary ..... 621
Improved Dwellings in Town, by Mr. C. Forster Hayward ..... 620
The Classification and Registration of Buildings, by Mr. Henry Parsons ..... 623
Institute Soirée ..... 624
Case under the Metropolitan Buildings Act ..... 624
Lead Burning v. Soldering ..... 625
Artists' Benevolent Fund ..... 625
Miscellanea ..... 625

## "Utility and Progress" in Architecture.

AMONG the historical contradictions of the human mind there are none, perhaps, more singular in their opposite and irreconcilable character than the philosophy of the ancient Greek and his architecture. The one consisted of theories of utterly unattainable moral perfection, the other was a practical combination of the useful and beautiful. Neither the one nor the other could have had much influence over the exclusive learning of Western Europe in the Middle Ages. Nevertheless, the *naïveté* of Greek construction is only equalled, as far as is known of the world, by that of its Gothic prototype. Perhaps both merely prove the force of common sense, and are parallels only as far as constructive principle goes; for Mediæval architecture was undoubtedly aided by contemporary religious sentiment. But it is still more singular to find that the knowledge of those principles upon which both Greek and Gothic architecture reached perfection virtually died out at the very time when the ancient speculative philosophy received its final overthrow by the teaching of Bacon, almost immediately after the revival, or rather the beginning, of Classical learning in this country. "Two words," according to Lord Macaulay, "form the key of the Baconian doctrine, Utility and Progress. . . . . The ancient philosophy disdained to be useful. . . . . It would not condescend to the humble office of ministering to the comfort of human beings. . . . . What is the highest good, whether pain be an evil, whether all things be fated? . . . . These and other questions of the same sort occupied the brains, the tongues, and the pens of the ablest men in the civilised world during several centuries." Although Plato had studied music and painting, had travelled into Asia Minor, Egypt, and Italy, he thought that to apply geometry to any useful purpose was to degrade an intellectual exercise to a level "fit only for carpenters and wheelwrights." Yet in his time and in his native city more perfect buildings existed than any which have risen in Europe since the days of Bacon,—perhaps than any which have ever been built. According to the Platonic theory, philosophy and the art of building have nothing in common; according to that of Bacon, everything. "In my own time," says Seneca, who is quoted by Macaulay in a celebrated essay, "there have been inventions of this sort, transparent windows, tubes for diffusing warmth equally through all parts of a building. . . . But the inventing of such things is drudgery for the lowest slaves; philosophy lies deeper. It is not her office to teach men how to use their hands." Bacon's philosophy was of a totally opposite kind, and it has changed the thought of the whole world; yet all the "fruit" which his teaching has yet brought to architecture consists in a happy facility, developed and improved in the course of three centuries, of copying the Classical and Mediæval buildings extant. Again, the study of anatomy has reached a higher degree of excellence in our time than at any former period, and the result is apparent in a widely-extended knowledge of the animal frame. Phidias himself probably knew less of a man's skeleton, and the muscles which cover it, than many a student in a modern school of art, but he has not yet been surpassed in modelling the human form. The images which adorned the walls of Christian edifices in the Middle Ages were fashioned by the hands of faith; yet the most fervid devotee will not venture to compare their crude outlines with the god-like perfection of Greek sculpture. Neither religion nor learning, as both are interpreted in our day, contributed to concentrate on the Athenian Acropolis perfect works of art. Nevertheless it is impossible to believe that the Greek world, under the sway of Pericles, was divided, and twofold,—its speculative philosophy the work of learned gentlemen, its practical architecture that of ignorant slaves; and it is equally difficult to imagine that the few so-called great architects who have flourished from Palladio down to his disciples of this century were men of more technical learning than Callicrates and Ictinus, the reputed architects of the Parthenon. The fact is, that it is hazardous to take literally all that the writings of antiquity leave readers to assume. Plato, the pupil of Socrates who is said to have defined the connexion between the useful and beautiful, must have appreciated a good building when he chose to lower his eyes to look at it. Indeed, it is not unlikely that he twitted the workmen of his time with their inability to produce anything as good as the Athenian Propylæa, and that his criticisms of the æsthetic excellence of the Parthenon fell disagreeably on the unwilling ears of his contemporaries.

The contemptuous manner in which the ancient philosopher treated architecture,—if he is to be judged by his writings,—affords perhaps an excuse for the treatment it sometimes receives at the mouth of the modern one, and if Greek architecture flourished in spite of it, modern architecture may yet do the same. It is better for an art to be removed from the sympathy of those who do not understand it, than that they should impede its progress by illiterate admiration. But no one, except professedly, could misunderstand the art of Athens at the period of her supreme beauty, for she could never have been what she was unless, as M. Viollet-le-Duc has put it, an atmosphere favourable to its development had existed. Most people then must have understood the component parts of the buildings amongst which they lived. There was no mystery about them, no need of inquiring to what style each belonged, or whence an innovation came. A Greek portico tells its own tale at a glance, and how it is supported, what is its use, or what its ornament implies, is patent to all who look at it even in ruins and in the midst of ruins at the present day. The eye is not puzzled with any apparent *tour de force*, but, on the contrary, the mind is immediately seized with the simple and natural character of the means employed to effect the desired end,—a column was absolutely a point of support, an architrave honestly a double lintel the crown of the cornice an overhanging eaves, surmounted by a marble or terra cotta eaves-gutter. There was nothing very new in these details, since other countries had long had columns and lintels, and projecting eaves. If refinement ultimately distinguished a few buildings for a few years, that was not achieved until after borrowing of forms and methods from other and older communities,—after repeated study, travel, and practice by generations of men during several centuries.

If the ancient philosophy pretended to deny its services to architecture, the modern philosopher has been equally unkind to the architect. However loth impartial critics may be to make an invidious comparison between Sir Edmund Beckett, Q.C., and Plato, it is impossible to doubt that the philosophy of both tends in a different way to a like contempt for the architect, and between the two he morally tumbles to the ground. "Dismiss," said Sir Edmund, some few months ago to the Institute of British Architects, "all grand ideas of new styles and the poetry of art, and the philosophy of architecture, and all that kind of thing; and, whatever you do, do not call yourselves artists. An artist is a man or woman who executes, whether he more or less designs, besides. . . . . You are artists in respect of your drawings, but not in respect of the buildings made from them. . . . . All the fine talking in the world cannot and need not make anything better of an architect than a designer of buildings." Truly a sad prospect for those who fancy they can see something mentally ennobling in the efforts of true architecture,—a much more unhappy state of things than even Mr. Ruskin has yet succeeded in seeing. Nor is Bacon, practical man as he was, less uncompromising in his opinion,—and we again ask pardon for mingling the names of Bacon and Beckett,—for he actually suggested in "The True Greatness of Kingdoms and Estates," that, as in Sparta, Athens, and Rome, slaves did the sedentary and within-door arts, so now slavery is abolished "that which cometh nearest to it is to leave those arts chiefly to strangers. . . . . and to contain the principal bulk of the vulgar natives within those three kinds, tillers of the ground, free servants, and handicraftsmen of strong and manly arts, as smiths, masons, carpenters, &c." Poor architect! who in Greece, as some say, was a slave and did great things; who in Mediæval Europe, as others say, was a master-mason, and did great things; whom Bacon would have chosen from

among aliens and foreigners, and whom a little later the Italian chose from among painters and sculptors; poor architect! that to-day in all seriousness many excellent and thoughtful people would sweep off the face of the earth.

And, forsooth, What is modern architecture? In this progressive and utilitarian age such a question is over and over again insinuated, not asked, by even enlightened men, and it is a most difficult query to answer; indeed, it is one rather to be illustrated by a parable. Thus, on the river Medway, about a mile from Maidstone, may be discerned, in the midst of gravel and sand heaps, a temple similar to many of those which, on the banks of the Nile, have charmed travellers in all ages. It is a cemented one-story building, with raking sides surmounted by a gracefully-curved overhanging cornice; and, contiguous to it, is a brick obelisk of thoroughly orthodox shape and termination pointing proudly heavenwards. In the one is concealed a steam-engine, and through the other rises the smoke of its fires, and both are connected with the waterworks of the Kentish metropolis,—buildings as useful as any which a Local Board can be called upon to devise, or on which architect or engineer can display a neat appreciation of antiquity. Taking things brutally and generally we answer,—That is modern architecture. And although some people may smile at such temerity, it is at least doubtful whether a hollowed obelisk is much more ludicrous than many of the buildings with which archæological research has lately endowed all the countries of the globe.

The Greek and Mediæval architects borrowed, their modern brethren have simply copied, and in their copying have flitted from one country to another, from one age to another, with the confident haste of superficial observation. Up to the advent of Palladio, the architecture of all Europe had followed certain cognate traditions, had been the speciality of no nation or men, had been guided, in fact, by common-sense rules and even natural laws, the property of every one. Then it was that an educated minority, dangerously possessed of a little learning, read Classical literature,—for, indeed, there was little other reading to be got,—and probably "talked" ancient architecture. The still living remnants of that art which flourished and was perfected before the speculative Greek philosopher pretended to ignore or depreciate its value, were doomed as soon as the pedants of the sixteenth century took them in hand. They lingered for a while, thanks to the workmen, who could not be taught to forget early traditional training. Indeed, some of the buildings of the Italian Renaissance seem to be less the work of a copyist than of a genuine borrower. The French,—a minority of whom, under Francis I., greedily appropriated Classical spoils,—clung to their artistic traditions almost as late as the age of Lewis XIV. And, although the splendid hypocrisy of that reign was reflected in each successive building through the length and breadth of Europe; although "slices of pilasters" and "bits of rustic" were even then fashionable in England, the new spires, then rising, of the English metropolis retained enough of native tradition to preserve their vitality as works of architecture. The domestic buildings of the reign of Queen Anne were well and truthfully put together under a pedantic guise. A little more learning and a great deal of increased pedantry were yet wanted to sever the weakened chain; and to Pope and Lord Burlington may be attributed the glory of having thoroughly broken it. With "Athenian Stuart" and Lords Aberdeen and Elgin came in and progressed the affected yearning for the "correct" and truly Classical in art which distinguished the close of the last and the beginning of the present century. Æsthetic upholsterers consummated the general ruin in the "*Style Empire*," and to the "poets and romancers" of the fourth George is due the reaction which immediately followed in favour of sentiment and "the picturesque." Almost every known form of architecture has been reproduced within the comparatively small compass of our island during the course of this century. Had the Assyrian marbles been brought to Europe fifty years before they were really landed it is probable that an attempt would have been made to reproduce some of their peculiarities on a small scale in the buildings of this country, just as the new-found beauties of Japan have been worked up in the "original Mediævalism" of the day. Façades of Egyptian character are still to be seen not only in London, but in places as remote as Cornwall; and as late as last week a successful explorer in Asia Minor ventured to tell an audience met to hear a lecture upon Egyptian architecture, that from experience in New York he considered it a "style" peculiarly adapted for gaols and similar buildings. As each new book or collection of drawings of any novel kind of architectural art has been presented to the public an ephemeral cultivation of it has taken place. The close imitation of Greek was followed by an equally close imitation of Italian, then of Gothic, buildings. There had been a combination called Græco-Roman; an Italian-Gothic combination was therefore inevitable. Nothing lasted, and a chronic compromise usually ensued. A house in the middle of a park might be in the Italian style, but the lodges at the park entrances might appropriately take a Gothic form. Churches and even chapels, it was said, might have high-pitched roofs and pointed arches, but town-halls and public offices must have low roofs, or none at all, and round arches. Bitter animosity was felt by the disciples of what were called the Pagan and the Christian schools. Men of intellect actually quarrelled over the merits of an arcade, or the origin of the pointed arch. The general antagonism endured until very lately; and only three years ago Sir Gilbert Scott deemed it worth while to allude to the two "camps." Even a Prime Minister has joined in the abortive discussion. Mr. Gladstone made a happy hit at the national weakness of employing a Classical architect to do Gothic public buildings, and a Gothic one to decorate Classical churches. But an extraordinary caprice has at length half settled the matter; and if it did not come from France it is supported by French models. A pupil of M. Millet, the well-known restorer of the Château of Francis I., at St. Germain, was induced to measure and draw certain "Châteaux, Palais, et Maisons" erected in France between the reigns of Henry II. and Lewis XIII., and what is more to publish his geometrical drawings to scale. M. César Daly had also completed the publication of his "Motifs Historiques." These fell loosely upon the profession of architects at the very moment when a few of their number had unconsciously started what is now known in auctioneering phrase as the "Queen Anne Style." This last, or at least latest revival, will follow doubtless the prescribed course of rise, progress, and decline before the abuse of archæological research by those who never think can be made to give place to useful and afterwards beautiful architecture by those who do. Each successive adaptation, according as fashion—and may we be forgiven the term—decreed, has helped, however, to confirm a belief in the common origin of all architectural forms. It used to be urged on the contrary that a different system guided the construction of different buildings at different periods, and that the education suitable to a man who is to devote himself to the designing of Gothic churches must necessarily be of a different character to that required for the construction of a Greek or a Roman edifice. Pages upon pages have been written to prove that it was wrong to reproduce, however perfectly, a Greek temple by men who, at the very moment were reproducing, with equal ability, Mediæval churches. Both procedures have separately and at different times been proved correct, as if an architect had only to ascend to the top of a high mountain, and—were it physically possible—to survey the countries of the world, in order to choose the particular building he thinks may please his employer. It is inconsiderate, therefore, to be angry with the critic or amateur who, intuitively conscious of the effect produced upon earlier communities by the language of architecture, fails to find in comparatively modern edifices any language at all. Although a low-caste Hindu knows the meaning of the carving upon the shrine at which he worships, cultivated English civilians can make nothing out of the "Gothic" of St. Paul's Cathedral in Calcutta. Few men stop to inquire about the story which is told within the pediment of the Royal Exchange; it would be tedious to attempt to decipher the façades of the Houses of Parliament. Within the last few months it has been discovered that certain new statues placed in an old cathedral in the West of England really meant something, and they have been hastily removed. Year after year the eyes of the country are attracted to fresh novelties, but its mind is not affected by them. Yet, according to Mdme. de Staël, "a fine monument of architecture is the only work of art which produces on the beholder an effect similar to the wonders of nature." No mere copy, however admirably executed, of however sublime a building, can produce that effect upon him who knows the original; to him who does not know it, the copy can only be an object of wonder, and the story imitated upon it an enigma which only the curious care to solve. Indisposed as many people may still be to admit it, there is quite as much genius displayed in Blenheim Palace as in the best recent châteaux of Gothic fashion; and some satirist may yet appropriately apply to more than one modern practitioner the harsh epitaph which Pope flung at the body of Sir John Vanbrugh:—

> "Lie heavy on him, Earth, for he
> Laid many a heavy load on thee."

There has been no lack of writers during the last thirty or forty years to tell the architectural world of its false aspirations. But the truth before it reaches its destination must be constantly repeated by many voices and pens. The proverb of "*de gustibus non disputandum*" is at the bottom of all the wrong notions about art that are now flying over the world. If it hold good with respect to taste, and we quote Lord Kames in his well-known "Elements of Criticism," "it must hold equally true with respect to the other external senses. . . . It may be resolved into the following general proposition that with respect to the perceptions of sense by which some objects appear agreeable, some disagreeable, there is not such a thing as a good or a bad, a right or a wrong." "But the Fine Arts," he continued, "are a subject of reasoning as well as taste." According to M. Viollet-le-Duc, the sentiment of pure and cultivated taste is merely an involuntary effort of the reason which does not find vent in expression. In April, 1864, Cardinal Wiseman, who talked well upon art matters, said to an audience at the South Kensington Museum:—"An additional clear deduction from observation of the past is this, that wherever monuments have been left us of architectural power and grandeur, these qualities have been exhibited in a characteristic style according to national types not varying from age to age, still less from year to year. There was a principle in architecture distinct from taste,—the second might change, but the first was invariable." Again, the reply to a critic which is to be found in the first volume of the "Stones of Venice," is equally destructive to the supposed unanswerable argument of taste:—"The writer," says Mr. Ruskin, "noticed my constant praise of St. Mark's. 'Mr. Ruskin thinks it a very beautiful building! We,' said he, 'think it a very ugly one.' I was not surprised at the difference of opinion, but at the thing being considered so completely a subject of opinion. My opponents in matters of painting always assume that there is such a thing as a law of right, and that I do not understand it; but my architectural adversaries appeal to no law; they simply set their opinion against mine; and indeed there is no law at present to which either they or I can appeal." This maxim that there is no disputing about taste covers every sin in works which paradoxically enough are the constant and ever-recurring subject of dispute. "When judged from their own point of view," says Mr. Fergusson, "we can never hesitate for a moment in estimating the relative value of any production of the Egyptian, the Classical, or the Mediæval schools; . . . . but when it is a question whether Egyptian or Classic or Gothic designs are to be adopted for modern English purposes, then indeed *de gustibus est disputandum*." It would, however, be tiresome to enumerate the reiterated opinions of learned men upon the unvarying nature of all true architecture of every nation and of every period of history until the close of the sixteenth century,—and so tiresome is it that the old hiss and the young laugh when a reference to "true principles" crops up at any professional gathering. Perhaps, however, the recent coalition between Greek and Goth, which Mr. Burges and Mr. Pullan strengthened during the Conference of Architects just concluded, points to an inclination to generally accept the conclusions arrived at long ago by both M. Viollet-le-Duc and Mr. Fergusson, and by the *Builder* long before them,—to admit, in fact, that neither Greek nor Gothic buildings are in themselves worthy to be copied, but that the principles upon which they were constructed are identical in their origin, and took a similar course in their development; and that these principles are the only things which can be safely imitated in the design and construction of modern buildings. It is something to have been able to declare, as Mr. Pullan did amidst the approbation of a professional audience, that a truce has been con-

cluded whereby "champions amongst the Goths walk into the tents of the Greeks, and prove their armour. . . . . Views on matters connected with our art have become broader and more liberal. . . . . The fundamental principle of all good architecture was the common-sense one of employing the best construction that the materials at the disposal of the architect and his knowledge of construction permitted, and of decorating the constructive features in the most appropriate manner."

Progress in architecture, however, is not likely to become a fact, unless thoughtful persons will try to regard a building as something more than a mere mass of materials put together according to the principles upon which buildings were erected two thousand or five hundred years ago. One of the objects of architecture is to make people comfortable. A man who chances at a theatre to be placed behind a column or other similar obstruction,—the right of every spectator being to see uninterruptedly the actors on the stage,—is justified in condemning such an obstruction, and to blame the architect for having put it there. Let him go further and inquire the use of the columns and piers which are too often mere obstructive accessories in many a modern building. Some thirty years ago he would have been told that the column was a part of the "order," and that without the "order" it was impossible to give any definite character to the architecture. It is even now admitted, perhaps indirectly, that the reason for filling up the interiors of modern churches with columns and arcades is that they are "in the style." No one denies that a large building in which every worshipper might see and hear the priest at the altar, or in the pulpit, or anywhere else where service is conducted, could be as easily and as economically built without such obstructions if "the style" permitted. This is possibly carrying the exigencies of reason too far, because Christian traditions impose certain arrangements of plan which modern worshippers are willing to maintain. We may, however, for the sake of example, suppose that the two Houses of Convocation require a building in which to assemble. To construct a huge many-sided edifice of two stories, vaulted upon a central support, because the Mediæval Chapter-houses were so built, would be to defeat the object for which the building was erected,—that object being for the members not only to see each other, but to read and write, and discuss; therefore, the nearer they get to each other in the centre of the hall, the better for the purpose for which they meet. To descend to details, it is very desirable, under both an English and an Indian sky, to have a covered portico or carriage-way to a public hall, or even a private mansion, but carried up, as it sometimes is in both countries, to the full height of a building, it is not a covering at all, for both rain and sun beat in between the columns. Again, the object of rearing a canopy, in architecture, is to protect something under it. Archæologists who urge that the centre of the Parthenon was open to the sky, hint that perhaps the huge figure of Minerva was protected from the elements by a canopy; but it must have been a much more practical piece of design than the sentimental coverings which were placed over the heads of statues in the Mediæval cathedrals. An Albert Memorial on the summit of the Acropolis, with a statue, not of bronze and gold leaf, but of wood, ivory, and precious stones, would require an absolute defence to it against sun and rain. More homely instances may be cited. The Greek, in his temples and public buildings, did not make use of any pipe to convey rain-water from the roofs to the ground. The rain fell naturally from the gutter through the open-mouthed heads of animals sculptured or cast upon the outside of the gutter itself. The world has preserved the heads as meaningless ornaments to the Classical cornice, for in modern buildings no roof is ever drained, except by rain-water pipes. Modern sculpture and decoration are similarly illogical, and, as it were, with artistic consent. By the Greek, certain trees and certain animals were held sacred, and he manifested his respect in portraying upon the walls of buildings ceremonies connected with them. In the Middle Ages people had much the same habit, although in a purer fashion, of appealing to God through images and devices upon walls and windows. Greek and Gothic architects gave a faithful delineation in marble and stone of the customs respectively of their time; and thereby, thanks to archæological science, all modern communities have been enabled to learn something of both, yet, strange to say, Pagan and Mediæval *motifs* and symbols,—most necessary to those who could neither read nor write,—have been the principal, if not the only, ornaments used to adorn buildings erected in England during this century! No revivalist of either architecture, however, can safely reproach the other, for if British statesmen have been made to figure as tyrants and philosophers, modern bishops and curates are even now going down to posterity in the garb of early saints.

## "ARCHITECTURAL STYLES."

A TRANSLATION into English of a full and yet tolerably compendious exposition of the characteristics of the principal known styles of architecture, by an able German writer,* is here offered to us as a desirable and useful addition to our architectural literature. One special reason why it should be so is mentioned in the short preface inserted in the English edition from the pen of Mr. T. Roger Smith, who observes that its claim on our attention rests not only on the comprehensive range taken by the author, but on the fact that it presents the subject from what is at present, to English architectural students, almost a new point of view. This consists in the fact that the author looks at his subject from the standpoint of "an academic and classical professor, and one brought up not only in familiarity with the best examples of ancient art, but with the habit of mind which recurs to classic and especially to Greek originals, both as a standard of taste and as models for the architectural treatment of modern works." This feeling is scarcely represented by any of the writers on architecture whose works are best known and most reputed in England at present; Viollet-le-Duc and Ruskin have, to the younger generation, effaced Chambers, Soane, and Cockerell. It may be that the present term of study and thought is more fruitful for modern architectural development than that of the old Classic school; we are disposed to think that it is so. But the classic and academic view of architecture is an important phase, to say the least, in the history of modern architectural theory and study, and in a certain sense it will always remain one side of the truth about architecture, though there may be great difference of opinion as to its relative value.

We have not unfrequently been asked by persons who wished to know more about architecture for the title of a work which would give them all the information and illustration they desired, without making too great a demand on their time. To expect busy people unconnected with the profession to read such a book as Mr. Fergusson's exhaustive "History" (if one may, by the way, apply such an epithet to any book on a subject which is practically inexhaustible) is out of the question: and though various more or less able short treatises on principles and styles of architecture exist, they are mostly very inadequately illustrated: and without full illustrations little idea is conveyed to the mind of a reader not acquainted with architectural terms and forms. The book we here speak of perhaps comes nearer to supplying the desideratum than most works we have seen in the language It is comprised in one moderate-sized volume; it is fully, and, on the whole, well illustrated by plans, perspective views, and details; and it furnishes readers with the general outline and characteristics of the main styles of the world, without perplexing them with too many examples or with theories and reflections which do not directly elucidate the main facts brought forward. The object of the book, in fact, is distinctly stated to be to give information, not to enter into critical dissertation; and consequently little or no mention is made of any theories as to genesis or relation of styles except those which are so generally accepted as to have passed into the category of historical record. Something more than this is necessary no doubt to the right understanding of architecture; and a short introductory essay on the main principles of the art would have been a useful addition, as giving a standing-ground from which to criticise the whole. But it was just as well not to embarrass the bulk of the historical illustration of styles with theory. If through the help of such a volume, we can get the reading public to recognise more clearly the individualities of the leading architectural styles, something at least will have been gained.*

There are, however, serious drawbacks to the acceptance of the work here offered, as a text-book for English readers on the subject of which it treats. To begin with, there is a most unfortunate blunder in the classification of styles in the book, and one liable to mislead all who are not already sufficiently acquainted with the subject to be aware of it. The three sections or "books" into which the volume is divided are respectively headed, "Ancient Architecture," "Romanesque Architecture," and "Modern Styles." The first book includes everything before the Christian era†; the third, everything from the Renaissance to the present day; the second, everything from the Christian era to the close of the Mediæval period. Of course, the employment of the term "Romanesque" in so extended a sense, is completely at variance, not only with the habitual phraseology of English architects and critics, but with the facts and relations of architectural style, as considered from the æsthetic point of view. However you may trace the links which eventually connect Mediæval architecture with Roman, it would be absurd to use such an expression as "Romanesque" of the late Gothic styles, from which every reminiscence of Roman influence has faded. For the benefit of the publishers, the readers, and the translator of the book, let it be here plainly stated that the term "Romanesque" is applied (rather vaguely, perhaps) to that phase of round-arched architecture prevalent in great part of Europe from about the sixth to the tenth, or into the eleventh century, in which the circular arch, and not a few of the architectural forms and details of Roman architecture, are retained, while mixed with a great deal of the manner and spirit, in detail and construction, which subsequently developed into the Gothic style in its complete form. Whether what we know as "Norman" architecture should be included in "Romanesque" or "Gothic" would depend a great deal on what we regard as the really characteristic element of Gothic; probably it is more logically defined as Gothic; but, at all events, there can be no question that when the pointed arch is once fairly established there is an end of the Romanesque element, as we all understand the term in England; and, therefore, even if this classification of Gothic as part of Romanesque were accepted in Germany, it should have been modified for English readers. But the fact is, that the whole thing is a jumble of the translator's. In the original German edition, the author heads his first and second "Books," "*Die vor-Christlichen Baustyle*," and "*Die romantischen Baustyle*"; that is, literally translated, "the præ-Christian styles," and the "Romantic styles." Then, under the latter head come the subdivisions, such as "*Die romanische Baustyl in Allgemeinen*" (the "Romanesque style in general"), "*Die normännisch-romanische Baustyl in England*" (the "Norman-Romanesque in England"); the "Pointed-arched styles" forming the concluding subdivisions of this "Book," but all under the general head of *romantisch*. Now *romantisch* is not "Romanesque," but "romantic," a word often used by German critics (and sometimes now by English ones, who have borrowed this use of it from them), to express one of the two great divisions under which all art and literature since the Christian era may be grouped; the "Classic," which is subjected to strict laws, and in which form is of pre-eminent importance, and the "Romantic," which represents the more free, wild, and imaginative art in which colour and effect predominate over strictness of form. On this supposition the classification of Rosengarten would be, in fact (as might be expected from a German critic), a very broad and philosophical one. Whether he intended it precisely in this sense it is not easy to say; it would not be quite beyond

* A Handbook of Architectural Style. Translated from the German of A. Rosengarten, by W. Collett-Sandars. With 630 illustrations. Chapman & Hall.

* It is really astonishing, we may here observe, what complete ignorance of the features of different styles is often evinced by those who are in general very well educated people, and who would on no account own to the same kind of ignorance in regard to music or literature, for instance. Not only so, but the want of any attention to the subject renders even the perception of the differences between styles beyond the power of many such observers. It seems almost incredible that persons of generally educated tastes, and with the power of vision and of reasoning, should absolutely be unable to perceive any incongruity in a Renaissance reredos, for instance, placed in a Gothic church, or to recognise that the two are composed and ornamented on different principles; but we have had evidence of this kind of style-blindness not unfrequently. The eye, after all, sees only what it has been taught to see.

† Except that the Indian styles are included in this book, though some of the examples given belong to a late period of the Christian era.

among aliens and foreigners, and whom a little later the Italian chose from among painters and sculptors; poor architect! that to-day in all seriousness many excellent and thoughtful people would sweep off the face of the earth.

And, forsooth, What is modern architecture? In this progressive and utilitarian age such a question is over and over again insinuated, not asked, by even enlightened men, and it is a most difficult query to answer; indeed, it is one rather to be illustrated by a parable. Thus, on the river Medway, about a mile from Maidstone, may be discerned, in the midst of gravel and sand heaps, a temple similar to many of those which, on the banks of the Nile, have charmed travellers in all ages. It is a cemented one-story building, with raking sides surmounted by a gracefully-curved overhanging cornice; and, contiguous to it, is a brick obelisk of thoroughly orthodox shape and termination pointing proudly heavenwards. In the one is concealed a steam-engine, and through the other rises the smoke of its fires, and both are connected with the waterworks of the Kentish metropolis,—buildings as useful as any which a Local Board can be called upon to devise, or on which architect or engineer can display a neat appreciation of antiquity. Taking things brutally and generally we answer,—That is modern architecture. And although some people may smile at such temerity, it is at least doubtful whether a hollowed obelisk is much more ludicrous than many of the buildings with which archæological research has lately endowed all the countries of the globe.

The Greek and Mediæval architects borrowed, their modern brethren have simply copied, and in their copying have flitted from one country to another, from one age to another, with the confident haste of superficial observation. Up to the advent of Palladio, the architecture of all Europe had followed certain cognate traditions, had been the speciality of no nation or men, had been guided, in fact, by common-sense rules and even natural laws, the property of every one. Then it was that an educated minority, dangerously possessed of a little learning, read Classical literature,—for, indeed, there was little other reading to be got,—and probably "talked" ancient architecture. The still living remnants of that art which flourished and was perfected before the speculative Greek philosopher pretended to ignore or depreciate its value, were doomed as soon as the pedants of the sixteenth century took them in hand. They lingered for a while, thanks to the workmen, who could not be taught to forget early traditional training. Indeed, some of the buildings of the Italian Renaissance seem to be less the work of a copyist than of a genuine borrower. The French,—a minority of whom, under Francis I., greedily appropriated Classical spoils,—clung to their artistic traditions almost as late as the age of Lewis XIV. And, although the splendid hypocrisy of that reign was reflected in each successive building through the length and breadth of Europe; although "slices of pilasters" and "bits of rustic" were even then fashionable in England, the new spires, then rising, of the English metropolis retained enough of native tradition to preserve their vitality as works of architecture. The domestic buildings of the reign of Queen Anne were well and truthfully put together under a pedantic guise. A little more learning and a great deal of increased pedantry were yet wanted to sever the weakened chain; and to Pope and Lord Burlington may be attributed the glory of having thoroughly broken it. With "Athenian Stuart" and Lords Aberdeen and Elgin came in and progressed the affected yearning for the "correct" and truly Classical in art which distinguished the close of the last and the beginning of the present century. Æsthetic upholsterers consummated the general ruin in the "*Style Empire*," and to the "poets and romancers" of the fourth George is due the reaction which immediately followed in favour of sentiment and "the picturesque." Almost every known form of architecture has been reproduced within the comparatively small compass of our island during the course of this century. Had the Assyrian marbles been brought to Europe fifty years before they were really landed it is probable that an attempt would have been made to reproduce some of their peculiarities on a small scale in the buildings of this country, just as the new-found beauties of Japan have been worked up in the "original Mediævalism" of the day. Façades of Egyptian character are still to be seen not only in London, but in places as remote as Cornwall; and as late as last week a successful explorer in Asia Minor ventured to tell an audience met to hear a lecture upon Egyptian architecture, that from experience in New York he considered it a "style" peculiarly adapted for gaols and similar buildings. As each new book or collection of drawings of any novel kind of architectural art has been presented to the public an ephemeral cultivation of it has taken place. The close imitation of Greek was followed by an equally close imitation of Italian, then of Gothic, buildings. There had been a combination called Græco-Roman; an Italian-Gothic combination was therefore inevitable. Nothing lasted, and a chronic compromise usually ensued. A house in the middle of a park might be in the Italian style, but the lodges at the park entrances might appropriately take a Gothic form. Churches and even chapels, it was said, might have high-pitched roofs and pointed arches, but town-halls and public offices must have low roofs, or none at all, and round arches. Bitter animosity was felt by the disciples of what were called the Pagan and the Christian schools. Men of intellect actually quarrelled over the merits of an arcade, or the origin of the pointed arch. The general antagonism endured until very lately; and only three years ago Sir Gilbert Scott deemed it worth while to allude to the two "camps." Even a Prime Minister has joined in the abortive discussion. Mr. Gladstone made a happy hit at the national weakness of employing a Classical architect to do Gothic public buildings, and a Gothic one to decorate Classical churches. But an extraordinary caprice has at length half settled the matter; and if it did not come from France it is supported by French models. A pupil of M. Millet, the well-known restorer of the Château of Francis I., at St. Germain, was induced to measure and draw certain "Châteaux, Palais, et Maisons" erected in France between the reigns of Henry II. and Lewis XIII., and what is more to publish his geometrical drawings to scale. M. César Daly had also completed the publication of his "Motifs Historiques." These fell loosely upon the profession of architects at the very moment when a few of their number had unconsciously started what is now known in auctioneering phrase as the "Queen Anne Style." This last, or at least latest revival, will follow doubtless the prescribed course of rise, progress, and decline before the abuse of archæological research by those who never think can be made to give place to useful and afterwards beautiful architecture by those who do. Each successive adaptation, according as fashion—and may we be forgiven the term—decreed, has helped, however, to confirm a belief in the common origin of all architectural forms. It used to be urged on the contrary that a different system guided the construction of different buildings at different periods, and that the education suitable to a man who is to devote himself to the designing of Gothic churches must necessarily be of a different character to that required for the construction of a Greek or a Roman edifice. Pages upon pages have been written to prove that it was wrong to reproduce, however perfectly, a Greek temple by men who, at the very moment were reproducing, with equal ability, Mediæval churches. Both procedures have separately and at different times been proved correct, as if an architect had only to ascend to the top of a high mountain, and—were it physically possible—to survey the countries of the world, in order to choose the particular building he thinks may please his employer. It is inconsiderate, therefore, to be angry with the critic or amateur who, intuitively conscious of the effect produced upon earlier communities by the language of architecture, fails to find in comparatively modern edifices any language at all. Although a low-caste Hindu knows the meaning of the carving upon the shrine at which he worships, cultivated English civilians can make nothing out of the "Gothic" of St. Paul's Cathedral in Calcutta. Few men stop to inquire about the story which is told within the pediment of the Royal Exchange; it would be tedious to attempt to decipher the façades of the Houses of Parliament. Within the last few months it has been discovered that certain new statues placed in an old cathedral in the West of England really meant something, and they have been hastily removed. Year after year the eyes of the country are attracted to fresh novelties, but its mind is not affected by them. Yet, according to Mdme. de Staël, "a fine monument of architecture is the only work of art which produces on the beholder an effect similar to the wonders of nature." No mere copy, however admirably executed, of however sublime a building, can produce that effect upon him who knows the original; to him who does not know it, the copy can only be an object of wonder, and the story imitated upon it an enigma which only the curious care to solve. Indisposed as many people may still be to admit it, there is quite as much genius displayed in Blenheim Palace as in the best recent châteaux of Gothic fashion; and some satirist may yet appropriately apply to more than one modern practitioner the harsh epitaph which Pope flung at the body of Sir John Vanbrugh:—

> "Lie heavy on him, Earth, for he
> Laid many a heavy load on thee."

There has been no lack of writers during the last thirty or forty years to tell the architectural world of its false aspirations. But the truth before it reaches its destination must be constantly repeated by many voices and pens. The proverb of "*de gustibus non disputandum*" is at the bottom of all the wrong notions about art that are now flying over the world. If it hold good with respect to taste, and we quote Lord Kames in his well-known "Elements of Criticism," "it must hold equally true with respect to the other external senses. . . . It may be resolved into the following general proposition that with respect to the perceptions of sense by which some objects appear agreeable, some disagreeable, there is not such a thing as a good or a bad, a right or a wrong." "But the Fine Arts," he continued, "are a subject of reasoning as well as taste." According to M. Viollet-le-Duc, the sentiment of pure and cultivated taste is merely an involuntary effort of the reason which does not find vent in expression. In April, 1864, Cardinal Wiseman, who talked well upon art matters, said to an audience at the South Kensington Museum:—"An additional clear deduction from observation of the past is this, that wherever monuments have been left us of architectural power and grandeur, these qualities have been exhibited in a characteristic style according to national types not varying from age to age, still less from year to year. There was a principle in architecture distinct from taste,—the second might change, but the first was invariable." Again, the reply to a critic which is to be found in the first volume of the "Stones of Venice," is equally destructive to the supposed unanswerable argument of taste:—"The writer," says Mr. Ruskin, "noticed my constant praise of St. Mark's. 'Mr. Ruskin thinks it a very beautiful building! We,' said he, 'think it a very ugly one.' I was not surprised at the difference of opinion, but at the thing being considered so completely a subject of opinion. My opponents in matters of painting always assume that there is such a thing as a law of right, and that I do not understand it; but my architectural adversaries appeal to no law; they simply set their opinion against mine; and indeed there is no law at present to which either they or I can appeal." This maxim that there is no disputing about taste covers every sin in works which paradoxically enough are the constant and ever-recurring subject of dispute. "When judged from their own point of view," says Mr. Fergusson, "we can never hesitate for a moment in estimating the relative value of any production of the Egyptian, the Classical, or the Mediæval schools; . . . . but when it is a question whether Egyptian or Classic or Gothic designs are to be adopted for modern English purposes, then indeed *de gustibus est disputandum*." It would, however, be tiresome to enumerate the reiterated opinions of learned men upon the unvarying nature of all true architecture of every nation and of every period of history until the close of the sixteenth century,—and so tiresome is it that the old hiss and the young laugh when a reference to "true principles" crops up at any professional gathering. Perhaps, however, the recent coalition between Greek and Goth, which Mr. Burges and Mr. Pullan strengthened during the Conference of Architects just concluded, points to an inclination to generally accept the conclusions arrived at long ago by both M. Viollet-le-Duc and Mr. Fergusson, and by the *Builder* long before them,—to admit, in fact, that neither Greek nor Gothic buildings are in themselves worthy to be copied, but that the principles upon which they were constructed are identical in their origin, and took a similar course in their development; and that these principles are the only things which can be safely imitated in the design and construction of modern buildings. It is something to have been able to declare, as Mr. Pullan did amidst the approbation of a professional audience, that a truce has been con-

cluded whereby "champions amongst the Goths walk into the tents of the Greeks, and prove their armour. . . . . Views on matters connected with our art have become broader and more liberal. . . . . The fundamental principle of all good architecture was the common-sense one of employing the best construction that the materials at the disposal of the architect and his knowledge of construction permitted, and of decorating the constructive features in the most appropriate manner."

Progress in architecture, however, is not likely to become a fact, unless thoughtful persons will try to regard a building as something more than a mere mass of materials put together according to the principles upon which buildings were erected two thousand or five hundred years ago. One of the objects of architecture is to make people comfortable. A man who chances at a theatre to be placed behind a column or other similar obstruction,—the right of every spectator being to see uninterruptedly the actors on the stage,—is justified in condemning such an obstruction, and to blame the architect for having put it there. Let him go further and inquire the use of the columns and piers which are too often mere obstructive accessories in many a modern building. Some thirty years ago he would have been told that the column was a part of the "order," and that without the "order" it was impossible to give any definite character to the architecture. It is even now admitted, perhaps indirectly, that the reason for filling up the interiors of modern churches with columns and arcades is that they are "in the style." No one denies that a large building in which every worshipper might see and hear the priest at the altar, or in the pulpit, or anywhere else where service is conducted, could be as easily and as economically built without such obstructions if "the style" permitted. This is possibly carrying the exigencies of reason too far, because Christian traditions impose certain arrangements of plan which modern worshippers are willing to maintain. We may, however, for the sake of example, suppose that the two Houses of Convocation require a building in which to assemble. To construct a huge many-sided edifice of two stories, vaulted upon a central support, because the Mediæval Chapter-houses were so built, would be to defeat the object for which the building was erected,—that object being for the members not only to see each other, but to read and write, and discuss; therefore, the nearer they get to each other in the centre of the hall, the better for the purpose for which they meet. To descend to details, it is very desirable, under both an English and an Indian sky, to have a covered portico or carriage-way to a public hall, or even a private mansion, but carried up, as it sometimes is in both countries, to the full height of a building, it is not a covering at all, for both rain and sun beat in between the columns. Again, the object of rearing a canopy, in architecture, is to protect something under it. Archæologists who urge that the centre of the Parthenon was open to the sky, hint that perhaps the huge figure of Minerva was protected from the elements by a canopy; but it must have been a much more practical piece of design than the sentimental coverings which were placed over the heads of statues in the Mediæval cathedrals. An Albert Memorial on the summit of the Acropolis, with a statue, not of bronze and gold leaf, but of wood, ivory, and precious stones, would require an absolute defence to it against sun and rain. More homely instances may be cited. The Greek, in his temples and public buildings, did not make use of any pipe to convey rain-water from the roofs to the ground. The rain fell naturally from the gutter through the open-mouthed heads of animals sculptured or cast upon the outside of the gutter itself. The world has preserved the heads as meaningless ornaments to the Classical cornice, for in modern buildings no roof is ever drained, except by rain-water pipes. Modern sculpture and decoration are similarly illogical, and, as it were, with artistic consent. By the Greek, certain trees and certain animals were held sacred, and he manifested his respect in portraying upon the walls of buildings ceremonies connected with them. In the Middle Ages people had much the same habit, although in a purer fashion, of appealing to God through images and devices upon walls and windows. Greek and Gothic architects gave a faithful delineation in marble and stone of the customs respectively of their time; and thereby, thanks to archæological science, all modern communities have been enabled to learn something of both, yet, strange to say, Pagan and Mediæval *motifs* and symbols,—most necessary to those who could neither read nor write,—have been the principal, if not the only, ornaments used to adorn buildings erected in England during this century! No revivalist of either architecture, however, can safely reproach the other, for if British statesmen have been made to figure as tyrants and philosophers, modern bishops and curates are even now going down to posterity in the garb of early saints.

## "ARCHITECTURAL STYLES."

A TRANSLATION into English of a full and yet tolerably compendious exposition of the characteristics of the principal known styles of architecture, by an able German writer,* is here offered to us as a desirable and useful addition to our architectural literature. One special reason why it should be so is mentioned in the short preface inserted in the English edition from the pen of Mr. T. Roger Smith, who observes that its claim on our attention rests not only on the comprehensive range taken by the author, but on the fact that it presents the subject from what is at present, to English architectural students, almost a new point of view. This consists in the fact that the author looks at his subject from the standpoint of "an academic and classical professor, and one brought up not only in familiarity with the best examples of ancient art, but with the habit of mind which recurs to classic and especially to Greek originals, both as a standard of taste and as models for the architectural treatment of modern works." This feeling is scarcely represented by any of the writers on architecture whose works are best known and most reputed in England at present; Viollet-le-Duc and Ruskin have, to the younger generation, effaced Chambers, Soane, and Cockerell. It may be that the present term of study and thought is more fruitful for modern architectural development than that of the old Classic school; we are disposed to think that it is so. But the classic and academic view of architecture is an important phase, to say the least, in the history of modern architectural theory and study, and in a certain sense it will always remain one side of the truth about architecture, though there may be great difference of opinion as to its relative value.

We have not unfrequently been asked by persons who wished to know more about architecture for the title of a work which would give them all the information and illustration they desired, without making too great a demand on their time. To expect busy people unconnected with the profession to read such a book as Mr. Fergusson's exhaustive "History" (if one may, by the way, apply such an epithet to any book on a subject which is practically inexhaustible) is out of the question: and though various more or less able short treatises on principles and styles of architecture exist, they are mostly very inadequately illustrated: and without full illustrations little idea is conveyed to the mind of a reader not acquainted with architectural terms and forms. The book we here speak of perhaps comes nearer to supplying the desideratum than most works we have seen in the language It is comprised in one moderate-sized volume; it is fully, and, on the whole, well illustrated by plans, perspective views, and details; and it furnishes readers with the general outline and characteristics of the main styles of the world, without perplexing them with too many examples or with theories and reflections which do not directly elucidate the main facts brought forward. The object of the book, in fact, is distinctly stated to be to give information, not to enter into critical dissertation; and consequently little or no mention is made of any theories as to genesis or relation of styles except those which are so generally accepted as to have passed into the category of historical record. Something more than this is necessary no doubt to the right understanding of architecture; and a short introductory essay on the main principles of the art would have been a useful addition, as giving a standing-ground from which to criticise the whole. But it was just as well not to embarrass the bulk of the historical illustration of styles with theory. If through the help of such a volume, we can get the reading public to recognise more clearly the individualities of the leading architectural styles, something at least will have been gained.*

There are, however, serious drawbacks to the acceptance of the work here offered, as a text-book for English readers on the subject of which it treats. To begin with, there is a most unfortunate blunder in the classification of styles in the book, and one liable to mislead all who are not already sufficiently acquainted with the subject to be aware of it. The three sections or "books" into which the volume is divided are respectively headed, "Ancient Architecture," "Romanesque Architecture," and "Modern Styles." The first book includes everything before the Christian era†; the third, everything from the Renaissance to the present day; the second, everything from the Christian era to the close of the Mediæval period. Of course, the employment of the term "Romanesque" in so extended a sense, is completely at variance, not only with the habitual phraseology of English architects and critics, but with the facts and relations of architectural style, as considered from the æsthetic point of view. However you may trace the links which eventually connect Mediæval architecture with Roman, it would be absurd to use such an expression as "Romanesque" of the late Gothic styles, from which every reminiscence of Roman influence has faded. For the benefit of the publishers, the readers, and the translator of the book, let it be here plainly stated that the term "Romanesque" is applied (rather vaguely, perhaps) to that phase of round-arched architecture prevalent in great part of Europe from about the sixth to the tenth, or into the eleventh century, in which the circular arch, and not a few of the architectural forms and details of Roman architecture, are retained, while mixed with a great deal of the manner and spirit, in detail and construction, which subsequently developed into the Gothic style in its complete form. Whether what we know as "Norman" architecture should be included in "Romanesque" or "Gothic" would depend a great deal on what we regard as the really characteristic element of Gothic; probably it is more logically defined as Gothic; but, at all events, there can be no question that when the pointed arch is once fairly established there is an end of the Romanesque element, as we all understand the term in England; and, therefore, even if this classification of Gothic as part of Romanesque were accepted in Germany, it should have been modified for English readers. But the fact is, that the whole thing is a jumble of the translator's. In the original German edition, the author heads his first and second "Books," "*Die vor-Christlichen Baustyle*," and "*Die romantischen Baustyle*"; that is, literally translated, "the pre-Christian styles," and the "Romantic styles." Then, under the latter head come the subdivisions, such as "*Die romanische Baustyl in Allgemeinen*" (the "Romanesque style in general"), "*Die normännisch-romanische Baustyl in England*" (the "Norman-Romanesque in England"); the "Pointed-arched styles" forming the concluding subdivisions of this "Book," but all under the general head of *romantisch*. Now *romantisch* is not "Romanesque," but "romantic," a word often used by German critics (and sometimes now by English ones, who have borrowed this use of it from them), to express one of the two great divisions under which all art and literature since the Christian era may be grouped; the "Classic," which is subjected to strict laws, and in which form is of pre-eminent importance, and the "Romantic," which represents the more free, wild, and imaginative art in which colour and effect predominate over strictness of form. On this supposition the classification of Rosengarten would be, in fact (as might be expected from a German critic), a very broad and philosophical one. Whether he intended it precisely in this sense it is not easy to say; it would not be quite beyond

* A Handbook of Architectural Style. Translated from the German of A. Rosengarten, by W. Collett-Sandars. With 639 illustrations. Chapman & Hall.

* It is really astonishing, we may here observe, what complete ignorance of the features of different styles is often evinced by those who are in general very well educated people, and who would on no account own to the same kind of ignorance in regard to music or literature, for instance. Not only so, but the want of any attention to the subject renders even the perception of the differences between styles beyond the power of many such observers. It seems almost incredible that persons of generally educated tastes, and with the power of vision and of reasoning, should absolutely be unable to perceive any incongruity in a Renaissance reredos, for instance, placed in a Gothic church, or to recognise that the two are composed and ornamented on different principles; but we have had evidence of this kind of style-blindness not unfrequently. The eye, after all, sees only what it has been taught to see.

† Except that the Indian styles are included in this book, though some of the examples given belong to a late period of the Christian era.

criticism, because there is no doubt that the Indian styles, which are not included in the second Book, but in the first, ought in that sense to come under the head of "Romantic" architecture, although it is obvious there would be a certain anachronism in applying the term to the earlier of them. Perhaps the best translation for English readers would have been "Post-Roman styles." At any rate, it is quite certain that "Romanesque," as the heading of the second Book, is in every sense wrong, and that by overlooking the important distinction between *romantisch* and *romanisch*, and translating them both by the same word "Romanesque" (which is the correct equivalent of *romanisch*), the translator has conveyed to all readers of the English edition a wrong impression upon an important point in architectural history and classification, besides crediting the German author with a mistake in the same direction which he certainly never made, but which, nevertheless, is actually referred to in the English preface as a special point in the book.

There are other peculiarities in Rosengarten's book which ought to have been noticed in introducing it to English readers. It should have been pointed out how meagre and out of date is the first chapter on Indian architecture, and that the only illustration given of that important form of Buddhist architecture, the "tope" (the small engraving, fig. 7), is both inadequate and, as regards the principal specimens, incorrect in form, for the walls of the typical tope do not batter inwards at the lower portion of the structure, as shown there, and could not stand, on a large scale, if they did. A more important point is the view which is taken of the Pointed style. It is perfectly absurd that a book should be published in England for the instruction of English readers on the characteristics of architectural styles, in which that style is described as the "Gothic *or German* style," and in which the illustrations of Gothic detail are taken in a majority of cases from the inferior and wiry detail of German Gothic, and the western façade of Freiburg Cathedral is offered as a typical specimen of the "soaring effect" of Gothic architecture. That is exactly what the Freiburg building does not illustrate; because, in place of the genuine and apparently natural and inevitable growth and development of one portion from another, which is the characteristic of true Gothic in its purest form, the lantern and spire at Freiburg are planted on a substructure with which they have no connexion, and no similarity of treatment or manner; not to speak of the hard and prosaic style of the whole. A reader who took up this book to gain some acquaintance with the characteristics of the Pointed style would derive an utterly wrong notion therefrom; he would merely see the style through German spectacles, and in place of its real beauties would only gain a knowledge of some of its failures, or at least of its secondary and partial successes. The German builders never really grasped or worked out the Pointed style in its finest capabilities, and the German mind has never appreciated or sympathised in its central and most poetic forms. Where German architecture is great is in its early round-arched or Romanesque style, which exhibits a union of solidity and grandeur with diversity of outline to a remarkable degree, and which, as Mr. Fergusson has observed, might have been developed into a very noble round-arched Gothic style. But "soaring" is not the prevalent quality of the German mind, and the Pointed-arched style, with its vertical tendencies, never received from them more than a half-hearted allegiance and an imperfect development. It is amusing to find in the chapter on the "Architecture of the present Day," the author's opinion as to the unsuitability of Mediæval architecture to the present period (an opinion we are by no means disposed to quarrel with *per se*), fortified by the reflection that "when the highly-gifted Schinkel only partially succeeded in attempts like these, it is not to be wondered at that less distinguished architects, who have but enjoyed a one-sided and deficient education, should not have attained satisfactory results in the endeavour to adapt this style to the every-day requirements of the present period." Now, the fact is, that "the highly-gifted Schinkel" never had, as his few attempts at it sufficiently prove, the slightest sympathy with the feeling of Gothic architecture, or comprehension of its peculiar poetry and beauty. If the question is to be debated whether revived Mediæval architecture can or cannot meet the tone and taste of modern times, and give rise to great and beautiful buildings which will be permanently admired, the controversy must at least be based upon some better specimens of what can be accomplished in this way than those left by Schinkel, who was, in fact, a beautiful draughtsman, with a great knowledge of classic art and uncommonly little feeling for architectural effect or expression, apart from sculpture and decoration. A characteristic indication of the German view of the subject occurs in the same chapter, a page or two further on, where it is observed that the buildings erected in the modern period in England differ essentially from those erected in similar styles in other countries, and that one characteristic of the English buildings erected in the Gothic style is "a deficiency of strongly-marked architectural keeping, for both main and subordinate features are generally irregular. In most cases the whole group is highly unsymmetrical, and the tower is at one corner, by which a picturesque effect is aimed at," and an illustration is given of this in a bad engraving of "A Memorial Church in Scotland," which, though not by any means a specimen of what our best modern Gothic architects produce, is at least a long way in advance in feeling and effectiveness, of anything generally produced in the same style by the compatriots of Schinkel. At the same time, it is not unwholesome to be reminded that unsymmetrical arrangement is not in reality by any means so much a part and parcel of Gothic architecture as it is the fashion to think in England, as we have often taken occasion to observe in our own columns. Modern English Gothic is further illustrated by what is complacently called "A View of the New Houses of Parliament, London, from the River," a statement for which the representatives of Sir Charles Barry might bring an action for libel against the publishers with every chance of success. It is a wretched engraving, representing one corner of the building, next to Westminster Bridge, the two towers and the river front being left out of account altogether. It is vexatious to think that this should have gone forth to German readers as an illustration of one of the finest of modern buildings. In England, where every one knows the building, it is of less consequence; but, for the credit of the publication, a better illustration should have been procured, or this one omitted altogether.

Other illustrations in the book are by no means so unsatisfactory as these. Almost the whole of what relates to Greek art and the styles directly connected with it is exceedingly well done, and fully illustrated with engravings of considerable finish and merit. Two remarks with reference to Greek architecture we may note. The one is that "the embellishments in the Grecian style uniformly assist in bringing out the intention of the mouldings, in such a way that the magnificence of Greek ornament never, with all its richness, runs counter to the simple, moderate, and practical character of the style; for the repetition of each scheme of ornamentation in form and adjustment fulfils to a certain extent that office for architecture which metre does for poetry." The other is in regard to the now undoubted fact of the introduction of polychromy on Greek buildings, about which Herr Rosengarten remarks that "this painting probably took place only in certain parts and details, in order to bring out the architectural form; as, for instance, in the case of mouldings, or in the frieze, to set off the sculptures. The temple, as a whole, appeared in the natural colour of the stone; and the artificial colouring, which was generally dark blue and dark red, though confined to subordinate details, contributed greatly to the general effect." An engraving of a portion of a Doric entablature, frieze, and cornice is added, attempting a restoration of this portion of the building, with the painted ornament, in a manner which has a very good effect and seems not at all far from what we may presume to have been the method and principle employed. What we would draw attention to is the author's theory of the partial employment only of the colour, leaving the marble as the ground,—a theory which seems to us far more credible, and more in accordance with the refined æsthetic sense of the Greeks, than the idea, supported though it has been by able English critics, that the marble surface of such a building as the Parthenon was entirely covered with pigment; and which seems contrary both to true taste and common sense.

The Roman style, and the styles of the Renaissance, are also well and fully treated and illustrated; in fact, it is a result of the classical leanings by which the author, in common with most modern German architects, is possessed, that all which is closely connected with Classic forms receives his attention and sympathy, while Gothic architecture, the greatest building style that the world has seen, is dismissed with comparative brevity and with insufficient and one-sided illustration, in which inferior types of design and detail are illustrated as if they were representative. The remarks on architecture of the present day show very insufficient acquaintance with contemporary English work.

In short, what Rosengarten's book required, in being presented in an English dress, was to be thoroughly well edited; portions containing ideas which are now superseded brought up to the level of the information and critical theory of the present moment, and misrepresentations which result from the exclusively German views of the writer corrected or counterbalanced. None of this has been done. The book is put before us in a translation which evinces in various points an insufficient acquaintance with the subject on the part of the translator, and preceded by a preface which says nothing to counteract any relative or positive defects in the book, but merely pats it on the back in introducing it to the English reader. Under these circumstances, it is impossible to regard the "Handbook of Architectural Styles" as really filling a gap in regard to English architectural literature which, had the translation been efficiently edited and annotated, it might very well have filled. As it is, we can only say that it may be useful as a popular treatise till a better one comes to fill its place.

## OPENING OF THE NEW VICTORIA BATHS AT PECKHAM.

THE large new public baths which have just been erected in St. Martin's-lane, Peckham, nearly opposite Rye-lane, have been formally opened. The buildings, including those which inclose the baths, together with the engine-house and offices attached, cover an area of nearly two acres in extent. There are two large swimming-baths running parallel with each other. The first-class bath is 140 ft. long, and 60 ft. wide, with eighty boxes for bathers fitted up around the water's edge. It is coverrd in by a wooden and glass roof, with an open lantern light for ventilation purposes, running the entire length. A balcony for spectators, with a frontage of iron trellis work, is carried round the bath above the bathers' boxes. The second-class bath is larger than that just described, being 160 ft. in length, and 60 ft. in width, and fitted with 140 bathers' boxes. The roof and open lantern light are uniform with the first-class bath. The baths have a continuous supply of water from an artesian well, 300 ft. in depth, which has been sunk on a piece of ground immediately attached, in connexion with which an engine-house has been erected, with a pump sufficiently powerful to lift 25,000 gallons of water per hour. Provision has also been made for securing the water supply to the baths, in the event of a break-down of the engine, by laying down a number of pipes connecting the baths with the street mains. In addition to the swimming-baths upwards of forty private warm and washing baths have also been erected in a separate portion of the building running parallel with the first-class swimming-bath, on the west side. A large area of land on the north side of the baths has been reserved for a skating-rink, which is about to be constructed.

The baths have been designed and erected by Mr. Higgs, sen., the freeholder, formerly the senior partner in the firm of Higgs, Hill, & Higgs, builders and contractors. They have been designated the "Victoria Baths."

**Drainage of Public Buildings.**—In the House of Commons, on the 8th of June, Mr. C. Denison asked whether the rumour was correct that the new Public Offices, owing to carelessness on the part of the builder or architect, were most defective in their drainage, no communication having been made between the drainage of the buildings and the main drain in the street. Lord H. Lennox said the drainage of the Home and Colonial Offices had been found on one or two occasions to be in a very deficient state, and, of course, the person responsible was the architect who designed, and under whom the contractors built,—namely, Sir Gilbert Scott. His (Lord H. Lennox's) attention was called to the matter, and in an incredibly short space of time the evil was remedied, as far as possible.

## PICTURES BY THE LATE L. R. MIGNOT.

A VERY remarkable collection of pictures is at present to be seen at No. 25, Bond-street; remarkable both for their artistic and poetic feeling, and for their distinctive character in regard to subject and aim. From time to time allusion has been made in our columns to stray works by Mignot, included in various exhibitions that have been noticed by us; but those who had only made acquaintance with the artist's works in this accidental manner will probably be surprised, as we were, at the impression they produce when seen collectively.

Louis Rémy Mignot was not a Frenchman, as is sometimes supposed from his name, but a native of Charleston, South Carolina, where he was born in 1831. At the age of sixteen he was sent to Holland, and placed in the studio of Schelfhout to learn the processes of the art which he wished to follow; we say "the processes" merely, because the style and feeling of his painting seem to be entirely his own, the result of the influence of the brilliant South American scenery upon an artistic and sensitive nature. His first artistic reputation, it is true, was gained in New York, and as a painter of North American scenery; but the really distinctive quality of his genius appears to us to have been developed by his visit to South America in '58, which gave rise to some of his finest and most original productions, and seems to have had a permanent influence in defining and developing his style. In 1862 Mr. Mignot came to England, ostensibly *en route* for India, where he proposed to himself to make the painting of Himalayan scenery his object: an intention which we regret was never realised, as he certainly had peculiar faculties for dealing with such a grand phase of landscape, so little treated by landscape-painters hitherto. Various circumstances, however, determined his stay in England, where he continued for the most part to practise his art till his death in 1870.

A specialty of interest is given to the exhibition, partly from the fact that in some of the most important works we find ourselves on ground unfamiliar to the English student of landscape. The characteristics of South American scenery have scarcely ever been set before us by an artist of genius, and even North American scenery, more accessible and better known, cannot be said to have furnished much as yet to the higher achievements of landscape painting. The great central wonder of Niagara has been the occasion of a great deal of rubbishy and common-place painting. No one can complain of common-place, at any rate, in Mignot's remarkable illustration, painted from the tower in the rapids above the Falls, and placing the spectator on the brink, as it were, of the precipice over which these turbid heaps of water are just about to discharge themselves, in a manner that is almost startling. A large picture of the Falls from below, with a mass of rock jutting out into the foreground, promised to be equal in effect to the other, but was never completed. The South American scenes, such as the "Tablelands of the Rio Bamba" (34), "Incense-breathing Morn" (46), "Moonlight in Ecuador," and "Sunrise in Ecuador" (102–3), are so much out of the beat of most English experiences of landscape that one must receive them in faith rather than in a spirit of criticism. But that they are genuine translations of Nature one is led to believe, not only from the evidence of thought and labour in the artist's style, but from comparison with the truthfulness of some other scenes more familiar to us. Look at the powerful little work representing a ruined cottage in Warwickshire, under the title "Desolation" (120), and we have in the perfect truthfulness of its tone and details an indication that the artist is to be trusted. A comparison of this with the splendid piece of glowing effect in the small "Sunset Study" (55) is sufficient to show Mignot's innate power and versatility, and his capacity for grasping the predominant feeling of a scene. No two subjects could be more utterly distinct in nature and in feeling than these, yet both are treated with equal power, and with a complete individuality of style.

The other quality which gives a certain specialty to Mignot's landscape-painting is that the best of his works combine in an unusual degree a feeling for the poetic aspect of landscape with a conscientious effort after truthfulness of representation; a combination not very common. Those who look with attention at the small painting of the "Valley of Meyringen" (36), for instance, will be surprised to find what delicate *nuances* of treatment, of colour, of aërial perspective are to be detected in this quiet and unpretending-looking picture. On a larger scale the same qualities are discernible in "The Lake of Lucerne" (29), and the large view of the "Jung-Frau" (2), a remarkably successful effort of realistic painting of a scene of this kind without hardness, and without losing the sense of distance and scale.

In illustration of the truly poetic feeling of the artist for suggestive aspects of landscape may be mentioned some of the small works in which a single chord of feeling is struck, such as a "Farm View in Warwickshire" (4), "Storm over Kenilworth Castle" (13), "Sunset Study, North America" (14), "Solitude," a rough sketchy painting of much power, representing a solitary rock in the midst of the ocean (22), "Sunset on the Pacific" (37), "Closing Day, South America" (62), "Winter View" (41), and others. A very striking and almost unique picture is that entitled "Thunder,—North America" (39), in which the aspect of sky and landscape, and even the *feel* of the air just before the crisis of a thunderstorm are remarkably conveyed.

The collection does not comprise anything like the complete works of Mignot, but enough are shown here to give a better idea than most persons in England, we imagine, have formerly had of his real power as a landscape artist. The collection has been got together by the exertions of the artist's widow, who has been desirous thus to obtain a wider recognition of her late husband's powers,—an effort which will have the sympathy of every one, on other besides artistic grounds.

## GENERAL CONFERENCE OF ARCHITECTS.

As was briefly stated in our report last week, a general meeting of the members of the Conference was held on Thursday, June 15th, at three o'clock, on which occasion Mr. John Whichcord, F.S.A., presided, when the subjects of the papers were, "General Building Regulations for the United Kingdom," by Mr. J. Honeyman, of Glasgow, and Mr. J. Clarke, C.E., of Liverpool; and on "The Registration and Classification of Houses," by Mr. Henry Parsons, of London, and Mr. J. Sellars, of Glasgow.

The Chairman said they had to consider two very practical subjects, and he was very pleased to find that three out of the four papers to be read were by gentlemen from provincial towns. He ventured to think both of the above subjects merited the serious consideration and attention of this body, being as it was a representative one, not only of the members practising in London, and members of this Institute, but of those of their fraternity who had similar works to conduct in the large provincial cities. There was no question that the consideration of the regulations for building in the various local towns was a matter of primary importance, and commended itself not only to those whose practice mainly lay in that direction, but also to those who had by chance works to carry on in the different towns, because anything more difficult to deal with than the contradictory laws that exist at the present moment he could not conceive, and, in fact, it required an analysis of architectural judicature to be gone through in almost every town in which one had works to carry out. He would content himself by announcing one fact in relation to the first paper, viz., that the Institute, through the secretary, had had a correspondence with the Local Government Board quite recently in respect of one particular question arising out of a revision of the bye-laws, which they understood was contemplated as to the preparation and deposit of elevation drawings. He suggested that that correspondence should be read, in order to show that the Board have under consideration the preparation of a series of bye-laws, which he trusted would hereafter supersede the bye-laws that at present obtain, having the contradictory ends to which he before alluded; and he was glad to say the Right Hon. President of that Board (Mr. Sclater-Booth) had invited suggestions from this Conference, so that he thought the time was exceedingly opportune for the discussion of the question. With regard to the second subject on the programme (they had also two papers), the registration and classification of houses was a somewhat novel idea, and was closely connected with the registration and classification of another class of structures, viz., ships. He could see comparatively little difference between the classification of buildings and that of ships. No doubt it was an important, and at the same time novel, subject to consider. With regard to the first subject it was one which every architect throughout the kingdom must have material interest in promoting and bringing it to the comprehensive and general acceptation of those practising both in the country and in the metropolis, so that they might perfectly understand what they had to deal with.

The secretary having read the correspondence alluded to,

Mr. Honeyman proceeded to read his paper, which we shall print hereafter.

Mr. J. Clarke also read a paper on the same subject. This we printed in our last (p. 594).

In the discussion which followed these two papers,

Mr. Porter remarked that the Metropolitan Building Act was inapplicable to the suburbs of London. It was almost impossible to build houses in the suburbs without coming in contact with the Metropolitan Board of Works at nearly every stage. He thought that the Metropolitan Building Act should only apply within a certain range. If they wished to build a verandah in the suburbs, they must make an application to the Board of Works, and often great delay occurred in getting their permission in the matter. Sanitary regulations were not touched in the Metropolitan Building Act. If they looked round London they saw buildings erected upon a subsoil of ashes, with the most wretched foundations. He thought the Metropolitan Act should provide that a concrete foundation should be put in in such cases. In other instances they saw buildings placed on a clay soil, with 2 in. or 3 in. of water, and the damp arising. Drain-pipes were laid without any closing of the socket-joints, and the sewage percolated through the floors. While professional men were prevented from doing some useful things, the speculative builder might do anything with impunity. With regard to discretionary powers of district surveyors, some of them were elected from the most distinguished ranks of the profession, and he thought more, rather than less, discretionary power should be given to them. He did not think there was any provision as to timber in houses in the Building Act, and he was sure, in many cases he had seen, there was great risk from the inadequate scantlings of the timber put in.

Mr. Drew (of Dublin) said, in that city there was no Building Act, and the inconveniences there had come to such a head that necessity arose for immediately promoting one, and steps were now being taken for the purpose; and for that reason he approved of many of the suggestions in the papers in so far as they related to a General Building Act, and, in the case of Dublin, he considered it would be a great boon to that city. The great difficulty that arose there—and he dared say it applied to other cities—was, that whereas the city of London proper was but a very small part of the metropolis, Dublin itself consisted of the city and independent townships, altogether amounting to a very large area, with a population of some 350,000. The objection had been raised that under corporate bodies the chief object in promoting such an Act would be to create local patronage, and not with a view for the general good. With that point before him, he disagreed with the opinion that district surveyors should be solely restricted to the duties of their office. In his opinion, being in independent practice gave an individual a position which was valuable in relation to the duties of district surveyor. There was one point which was new to him, and struck him,—that was the proposal to appoint referees. There were many points of difficulty at present. He could go so far as to say, having no Building Act in Dublin, they had nothing to define what constitutes a party-wall, and that would be likely to give rise to a great deal of litigation in Dublin. At the same time he thought the appointment of referees

in the case of the working of the Building Act would tend to take away practice from the legal profession, and that was a point which he cordially approved of. At the proper time he would, with the permission of the Conference, move a resolution on this subject.

Mr. Roger Smith would like to say a few words on some aspects of this question. When he came into the room he felt there was great difficulty in dealing with it, not so much with regard to the regulations to be defined, as to the mode in which their observance could be secured. The greater part of Mr. Honeyman's paper was directed to the status of district surveyors in carrying out the provisions of the Act, and he dissented from several of the views expressed. In the first place, he thought it would be better to leave London alone. London was very different from every other town; it was, in fact, a county by itself. It had a system which (with many faults) worked very well, and there could be no question the idea would never be entertained of including the metropolis in any general building Act. He thought with regard to London there could be no greater mistake than altering the status of the district surveyors and substituting for them the class of officers which Mr. Honeyman recommended. He said that not as the result of a few years' personal experience as a district surveyor, but as an architect in practice and coming much in contact with district surveyors. The difficulties of building were great and varied. It was almost impossible to fit the Act without great consideration and care, and if a person administered the Act who was not an official person, and had only to insist upon the work being carried out in accordance with the Act, and was himself engaged in building, and could sympathise with architects, and show what it was impossible to consent to and what he could reasonably consent to, half the difficulties disappeared, and the others were met in a more cheerful and reasonable spirit. This had happened to him constantly, and he could bear testimony to the fact that he had been met by district surveyors uniformly in the same spirit whenever he had got into trouble. Now, if they had men taken from practice, and simply officials, with nothing else to do but to carry out the Act, they would find an amount of friction which would be unendurable. If they left London alone, there were three or four large cities which they might assimilate to London. In large cities like Edinburgh, Glasgow, Liverpool, and Dublin, they might succeed in obtaining district surveyors from the same class as they did in London—that was, from men in general practice, and in their hands he imagined the Building Act could be safely administered, with which some additional regulations relative to foundations and sanitary matters and thickness of materials might be incorporated. But the object of the Building Act was not to supersede private surveyors. If people chose to put up buildings without science they should take the consequences. Building Acts were framed for public safety, and the Act, improved as suggested, might be taken as the basis of the administration of three or four large towns. When they came to smaller towns the difficulty of finding persons who could be entrusted to administer the Act might be great. He imagined in small towns a paid officer of some description would have to be put up with, and when that was the case he (Mr. Smith) imagined that the simpler and fewer the regulations were the better. He had heard with pleasure that Mr. Honeyman considered the last resolutions of the Local Government Board were incomplete. The more incomplete they were the less likely they were to lead to difficulty and trouble which could not be got over. He imagined that more than simple regulations as to thickness of walls, and precautions against the spread of fire, and a few general details, would be found exceedingly difficult of enforcement. This was a subject which was difficult to deal with in detail, and they could not do more than affirm broad principles. There could be no doubt general regulations were desirable. He hoped he should not be misunderstood when he used the word "incomplete," but what he meant was that the regulations should touch as few subjects as possible. The subjects which they touched should be decided very definitely, and, as far as possible, be limited to matters of the most urgent necessity. In all probability the establishment of referees might be made very useful and a very satisfactory feature in any Act; but those who remembered the working of the Metropolitan Building Act preceding the present one would be aware that the impossibility to make the official referees a practicable body was the cause of that Act being repealed.

Mr. Arthur Cates thought it desirable that the Conference should learn something of the model bye-laws, a copy of which had been sent to the Institute by Mr. Sclater-Booth. It seemed to him (Mr. Cates) probable that the Local Government Board felt the same difficulty as had been felt by architects practising in the provinces, whose business laid them under the control of the local bodies. There was also some difficulty from the framing of the bye-laws themselves, which had been drawn up at different periods by men with different views. The great point, he apprehended, was, that the bye-laws should not be inconsistent with the Act under which they were framed. An instance came under his notice in which the local authorities had prepared regulations purporting to be drawn up under the bye-laws, which required conditions to be satisfied far beyond what the bye-laws prescribed. That was a condition of things which it was desirable to get rid of. It was also desirable that there should be uniformity, and it appeared that the Local Government Board had devoted attention to the preparation of this general scheme of model bye-laws, a copy of which had been sent to the Institute, and on which communication and observation were invited. It was impossible for them at a meeting like this to deal with a mass of matter comprised in nearly 100 separate clauses, beginning with the ordinary definition clauses, and going on to the model forms and notices by which the whole system was to be worked; but it might be interesting to the Conference if he glanced at the heads of the subjects, from which they would see the general scope and intention of these bye-laws, which, he should say, were limited by the words of the 157th section of the Local Government Act,—he should rather call it the Public Health Act. Mr. Cates read the 157th clause, and then gave a summary of the bye-laws, after which he remarked that it would seem these bye-laws would provide what was so much required,—viz., provisions for the regulation of buildings with regard to construction and the necessities of health. Unfortunately, the limitation that these bye-laws must be made in conformity with the provisions of the Public Health Act seemed to preclude the possibility of their being carried further. It was possible that when these bye-laws came to be considered by the Council of the Institute, they might come upon some suggestions which the Local Government Board might think fit to submit to the Legislature, and in that way obtain additional powers; but even under the present powers, if they got a proper system of bye-laws carefully worked out,—and these appeared to have been prepared with the most thorough attention to all the points of difficulty arising in practice,—they would probably avoid those difficulties which Mr. Roger Smith contemplated would arise from too detailed regulations, and might tend, perhaps, to modify that gentleman's views. He thought if a general code could be established it would be a great advantage to the country. The great difficulty would be to secure its operation in districts of small populations. That was a point on which his knowledge was very trifling, but it seemed to him difficulties would arise in securing the application of the scheme to small localities, where it would be no less valuable than in the larger towns. It was a problem to be solved, and one which deserved a great deal of attention. He hoped expression would be given to the obligation they were under to Mr. Sclater-Booth for the attention he had paid to the request of the secretary of the Institute, and he hoped something would be done in a practical form to show that they appreciated that polite attention, and that some steps would be taken to elicit the observations which had been looked for. There could be no better centre than the Institute of Architects, to which the experience of the architects of the country could be brought, digested, and arranged; and he would give his support to Mr. Drew's proposition when it was brought forward, that the bye-laws in question should be referred to the Council. The form of resolution which occurred to him was as follows:—"That the Council of the Royal Institute of British Architects be requested to appoint a committee to consider the subject of general building regulations for the United Kingdom, who shall communicate with the provincial architectural societies and the Local Government Board, and report at the earliest period to the Council for the information of the profession."

Mr. Drew expressed a hope that the Conference would not separate without approving some general principle. It would strengthen the hands of provincial societies if some resolution of that kind were passed. His proposition would be, "That this meeting approves of the principle that a general Building Act regulation, applicable (within certain limits) throughout the kingdom, is desirable."

The above resolutions having been seconded, were put by the chairman, and unanimously adopted.

Mr. Hansard, in proposing a vote of thanks to the authors of the papers, expressed a hope that architects generally, especially those in the country, would communicate their ideas on this subject to the committee which would no doubt be appointed.

The Chairman, in closing the discussion, said he ventured to repeat the observation he made at the opening of this question, viz., that he thought the subject—although not of that æsthetic or artistic interest which other meetings of the Congress had had the opportunity of enjoying—presented features second in importance to no other that had come before them. He was exceedingly pleased at the tone which the discussion had taken, and at the practical result of it in remitting this subject to a committee to deal with it in detail, which in conjunction with the department of the Government who had charge of the measure, he believed would be prolific in results. The meeting, although not so large numerically as he could have desired, was representative, no doubt, and he hoped in the deliberations that would take place on this subject they would have the advantage of the opinions of their brethren in the different provincial towns. Those opinions he was sure would be received with great thankfulness, and would have every attention, especially at a time when the constitution of the Institute itself was under consideration, and with respect to which the committee cordially waited the co-operation of those who were not resident with them.

The vote of thanks having been unanimously accorded,

Mr. Honeyman, in acknowledging the compliment, said the discussion had not touched upon a very extensive range of subjects. It had been confined chiefly to the duties and position of district surveyors, which he thought would probably be the case, because the view he took of that question he feared was not popular with the greater part of his audience. He might say he had not heard anything to check his opinion that his proposition to limit the surveyor's duties in the way suggested was not right. Mr. Roger Smith had pointed out that in London they were contented to remain as they were, and if that was the case he (Mr. Honeyman) could assure them he had not the least wish or intention to draw them into any uncomfortable position. If a general Building Act were not wanted for London, let it be exempted; there might be many good reasons why it should be, although no reason occurred to him. He did not think Mr. Roger Smith mentioned any practical reasons why a surveyor should be a practising architect, except that it reduced the friction in the matter,—in other words, the surveyor might require a good deal more to be done than was considered necessary; but it was a question whether it was a good reason to the public for selecting surveyors in practice in preference to those whose duties were confined to their office. On the other hand, Mr. Cates said it was possible to frame bye-laws which could be brought into operation perfectly well by such a class of surveyors as he (Mr. Honeyman) indicated in his paper. It was connected with another point, viz., that in the country it would be extremely difficult to find the class of men for surveyors who were readily found in London, and probably in some large towns, but they formed a very small portion of the country after all.

Mr. Henry Parsons then read a paper on "The Registration and Classification of Houses," given on another page.

On the same subject Mr. J. Sellars, of Glasgow, read a paper, which appeared in our last issue.

The Chairman invited discussion upon a subject which, he said, was more novel than that which had previously come before them.

Mr. Collins said it was not quite so novel as the chairman anticipated. It had occupied

the attention of two bodies, viz., the Medical Association and the Social Science Association, and in both committees had been appointed to consider the subject. He was not able to agree with the statement that the way in which a house was built only affected the pocket of the owner. It affected the very vitality of the people, and because the Social Science and the Medical Association had so thought, he had endeavoured to set up some scheme which might obviate in some measure the extremely faulty construction of dwellings which, they were aware, prevailed not only in the metropolis, but throughout the whole country. This comprised proper foundations, the necessity for the drainage of the subsoil, and the proper provision for other drainage and present evils which they knew the difficulty in correcting. It was thought if every house was bound to have a habitable status, to be indicated by the certificate of district surveyors or Boards of Works, any person who wished to purchase a house might at once see the character of the building he bought. It was proposed that this should be permissive. An intending purchaser would ask for the certificate, and if it was not forthcoming the property would be depreciated. It was difficult for some classes of people to get professional opinion upon buildings, for the want of means of obtaining them; and while he did not agree with the whole scope of Mr. Parsons's paper, he concurred with the general principles which it set forth, and he thought, if a system of registration of houses were established, a better class of dwellings would be erected, and the public would not be inveigled into the purchase of worthless properties all over the country. In conclusion, Mr. Collins kindly offered to place any papers and information collected by the bodies referred to at the disposal of any committee which might be appointed by the Council of the Institute.

Mr. Mathews remarked that nothing was of more importance in a house than that it should have a good foundation, and nothing was more difficult to ascertain afterwards. In no better way could this be remedied than by such a system of registration as was now proposed. He thought if it were carried out it would be a great protection to property, and would tend to the erection of better houses than they had now. At present when a person contemplated purchasing a house, the usual plan was to employ a surveyor, and in nine cases out of ten the person employed was an auctioneer or land agent, who knew nothing about the construction of a house. He made his valuation upon the basis of so many rooms and so much rent, without knowing whether the house was erected in a proper manner, but simply looking at the size of the building, its rent, and its external appearance. The result was, persons erecting houses in an inferior way at half the cost, were able to get the same amount for them as was paid for houses erected under the supervision of an architect; and it often happened that a man could scarcely see his money back again after erecting a number of properly-constructed houses. It was a matter not only affecting them as architects, but also affecting the health of the people, more particularly with regard to foundations constructed in a manner to comply with the sanitary requirements of the case. He was entirely in favour of the suggested system of registration.

Mr. Porter observed that the existing Act was beset with many complications, and though some additional clauses with regard to foundations, &c., might be advantageously introduced, perhaps some of the existing clauses might be omitted. The idea of certificates was, to his mind, an extremely valuable one. Some amendments were proposed in the Building Act with regard to foundations and proper drainage of the subsoil. When a house was finished the district surveyor should have the power, and it should be his duty, to give a certificate that the house had been erected in accordance with the regulations of the Building Act, which would show that some regard had been paid to substantial construction. They had plenty of law, but the difficulty was to get it put in force. Mr. Parsons had suggested that there should be three classes of residences. If "extra first" were stipulated for, there might be a clause that that class should only be erected under proper professional supervision. As to second and third class houses, he feared there would be a difficulty in enforcing the necessary supervision, but with respect to the first class, he thought the Institute might make a strong point of professional supervision.

Mr. Anderson proposed a vote of thanks to the authors of the papers, and expressed a hope that the ventilation of the subject would conduce to some practical result.

The Chairman said, that to him the question under discussion was most interesting, and was also novel. The only system he had hitherto had to deal with was the old system of the rating of buildings under the Metropolitan Building Act antecedent to that which was now in operation. But that rather had to do with the scale of the building than its constructive excellence. The discussion had led a little into the provisions of the Building Act, and away from the direct issue of the subject of the papers. For example, the foundation work would become an important integer in the classification of houses; at the same time, that was one of the defects in the existing Metropolitan Building Act, as well as in the bye-laws of provincial towns. He could corroborate the remarks of his friend who had just spoken as to the mode in which scamping builders dealt with foundations and drainage works. To his knowledge, hundreds of buildings were erected upon consolidated mud taken from the river. The regulation was that they should be placed on solid ground or concrete; but it omits to state what thickness the concrete must be. The consequence was, that in the localities he spoke of human habitations were built upon the indurated mud of the Thames, with such an amount of concrete as just saved the definition, and no more. He believed in any modification or reconstruction of the Metropolitan Building Act, there were many defects that required to be remedied, and it might be made to include this novel idea of the classification and registration of houses, similarly to Lloyd's List with regard to shipping; and, as far as he could see, it would be essentially practical, and of considerable value to all parties concerned, originally to those on whose land the buildings were placed, whilst as to the benefits to the occupiers there could be no question. Altogether, it was a system which he should rejoice to see carried into operation. He did not see that legislative enactment was necessary for the purpose. He believed it would be self-supporting with regard to cash, and that the possession of such a certificate as was suggested would be of such value to persons purchasing property that there would be no difficulty with reference to the small charges incident to it. He was aware how difficult it was to organise and carry out matters of this sort and make them self-supporting, but if it could be revised, no doubt it would be infinitely better under private management than under legislative enactment. He trusted these papers and discussions would result in something practical being carried out.

The vote of thanks to the authors of the papers having been unanimously agreed to, and Mr. Parsons having briefly responded, the meeting adjourned.

## EGYPT.

On Thursday evening Mr. Phené Spiers read a paper before the Society for the Encouragement of Fine Arts, at the rooms of the Institute, on "Egyptian Architecture." The paper was illustrated by a great profusion of drawings and sketches, principally from the pencil of Mr. Spiers himself, whilst many others were contributed by Professors Donaldson and Hayter Lewis, Mr. Cooke, and others. Dr. Richardson was called to the chair, and the audience was a large one.

The following is an abstract of the paper read on the occasion:—

Mr. Spiers commenced by pointing out how the earliest types of the habitations of mankind had from time to time served to give the original features which we now find in the oldest Egyptian buildings. From the hut and tent were derived supports such as the various kinds of columns; the mud or crude brick dwelling gave the peculiar raking or sloping side which we find in the pylons and temples, whilst the caverns and clefts in the rock (the original homes of hunters and fishermen) suggested possibly the idea of excavated temples and tombs. He then drew attention to the great age of the monuments in Egypt as compared with those in Europe, and the wonderful execution and finish of the earliest specimens. After a description of the position of the temples and tombs by the banks of the Nile, and a few words about the climate, religion, and history of the Egyptian people, Mr. Spiers proceeded to divide his subject under two heads, tombs and temples, placing the tombs first, in order to describe the earliest remains, viz., those of the Pyramids. Of these there have been found and examined some sixty-seven, the royal tombs of the kings of Lower Egypt, whose capital was Memphis. The structure of all these pyramids commenced in the centre and gradually developed, each successive layer of stone increasing the structure in lateral dimensions and height. After the death of the king his body was placed in a central chamber, and the whole pyramid covered with a casing of polished limestone, concealing the steps formed by the receding courses of stone, and with them the entrance doorway. After describing the pyramids of Cheops and Cephren, in the latter of which a portion of the external casing still remains, and alluding to the pyramids of Mycinnus, of Dashoor (erected in brick), and others, Mr. Spiers passed to the excavated tombs, more especially those of the kings and queens at Thebes. It is chiefly in these that we find the marvellous drawings which represent the domestic life and customs of the Egyptians, the outward signs of their social state and religious character, and their mode of embalming the dead. These tombs also were excavated during the reign of the king, and in a measure vary in extent according to the length of his reign. The temples of Abousimbel, Derr, and Girscheh, were next described, being partially excavated and partially built. Turning then to the second class of the temples, Mr. Spiers noted that the civilisation of the Egyptians ascended the river from the Delta, and that the records of the earliest periods of Egyptian architecture were to be found in the representations of the façades of temples on the walls of the tombs of Memphis. The principle of the arrangement of the Egyptian temple Mr. Spiers explained by various plans and diagrams. He showed how the earlier buildings had been added to and developed from the mere cell or sanctuary, and how, in the later temples, the plans were similar, though every portion may have been erected within a short period. This showed the wonderful conservative principle which guided the Egyptian architects, and which might, in some measure, account for the comparatively slight changes in the Egyptian style of architecture during the 3,000 years it held sway. The architectural elevations, the pylons, court, hall of columns, were then described, and the position of the obelisk, seated figures, and sphinxes, which form the avenues to the temples. In speaking of the one or two buildings which are classed as palaces, Mr. Spiers pointed out that as the king was the spiritual as well as temporal ruler, the temple would be his palace. The buildings of Medine Habou, Dahr El Bayree, &c., however, from the nature of their sculptured decorations, were no doubt exclusively palaces. In speaking of the hall of columns, Mr. Spiers took exception to its denomination, as by a hall we are accustomed to understand a large open space covered over, and with the general view interrupted by supports, or with columns so slender that they do not obtrude themselves. "The columns at Karnac, however, are so enormous, and their intercolumniation comparatively so small, that a diagonal view can never be obtained, and the hall there is a series of columns." The difference of the architecture of the temples constructed during the Ptolemaic rule was pointed out, as also those of the so-called Mammeisi temples, one of which was copied in the Paris Exhibition of 1867. The whole temple was invariably surrounded by a crude brick enclosure, with groves of trees planted around, and reservoirs and tanks of water, the trees of one being still visible behind Karnac and the temple of the goddess Mouth. Mr. Spiers then described the various kinds of piers, columns, and capitals, and concluded his lecture by a few remarks on the wonderful climate of Egypt, which would preserve the Egyptian monuments for all time were it not first for their continual invasion by the sand of the desert in consequence of the non-cultivation of the land round the temples (due to the fact that the country is being depopulated by the withdrawal from Upper Egypt of the chief male population for works at Cairo and Suez); and, secondly, from the wanton destruction by travellers, who destroy whole bas-reliefs in order to carry away small fragments. The appointment of Mariette Bey has done much to remedy this latter evil, and it is to be hoped that when the railway is carried up to Thebes, and the number of visitors there increased, greater powers will be given to him to stop these ruthless and barbaric invaders.

After the reading of the paper, the Rev. Mr. Brock spoke of the thrilling interest with which

the gigantic ruins of Egypt inspired the visitor. Alluding to the figures of Egyptian gods in the sanctuary of Abousimbel, he mentioned that they were so placed in the temple that in the spring and autumn the beams of the rising sun pierced through the long avenue of pillars, and struck full upon the figures of the four gods, which produced a very beautiful effect, and amply repaid the visitor for the early hour at which it was necessary to rise in order to witness this phenomenon. He gave his opinion that the crude brick walls were as ancient as the temples round which they were built.

Mr. Cooke followed with some remarks expressive of his great admiration of the ancient monuments of Egypt, which he characterised as being perfectly beautiful. He considered that every sensible person who had the means and opportunity, should visit that wonderful and most interesting country, and highly complimented Mr. Spiers upon his good judgment in selecting it as the scene of his studies during his travelling studentship. To his great industry whilst there the beautiful drawings exhibited bore ample testimony.

Mr. Danvers Seymour begged to thank Mr. Spiers personally for his lecture. It was his lot to visit Egypt at the time Sir Gardner Wilkinson was there, and he had retained a great interest in that country ever since. Of course, the discoveries since he was there in 1845 were very great, and he was glad that a man of the ability and experience of Mr. Mariette had been engaged by the Khedive to form a museum for the preservation of works of art of the country. He was sorry to hear that these monuments were rapidly disappearing under the hands of visitors from countries considered to be civilised. It was a disgrace to them to carry away fragments from the monuments to which they belonged, and which destroyed the most beautiful portions of them. The monuments of Greece had, to a great extent suffered in the same way, and he was afraid those of Egypt would share the same fate unless measures were taken to prevent it. Mr. Brock assumed that the unburnt brick walls round the temples were of the same date as the temples themselves, and he entirely agreed with that opinion. He had himself seen bricks taken from the mounds of Babylon which bore the stamp of the Babylonian kings upon them. Mr. Spiers had not entered into the relations of Egypt with Assyria. It was at one time considered that Egypt borrowed largely from Assyria; but there was no doubt Egypt belonged to an earlier dynasty than its relations with Assyria, in an artistic point of view, would indicate; though there could be no doubt in the middle period of their history Egypt did borrow largely from Assyria. There was a large commerce between the two countries, and in the British Museum there were remains of articles which were undoubtedly brought from Assyria, and *vice versâ*. He was glad to find that Mr. Cooke and other artists were turning their attention to the illustration of the monuments and scenery of this beautiful region of the earth, and he hoped the lecture they had heard that evening would be the means of directing a greater amount of attention to that interesting country.

Mr. Carpenter (recently returned from Egypt) said, with regard to the destruction of monuments referred to by Mr. Danvers Seymour, he (Mr. Carpenter) saw some tombs very much injured—not by visitors, but by the rude carvings of the natives upon them of steamboats and people rowing—principally the work of Arabs. He had seen some very excellent carvings in a hard dark brown wood, which showed that the Egyptians were great in the representation of figures from a very early date.

Mr. Wood (the discoverer of the Temple of Diana at Ephesus) said he would be glad to know what was the size of the golden chamber in the tomb spoken of. [Mr. Spiers replied, 30 ft.] And also whether the arrises of the granite blocks referred to had been removed, as was the case in the Temple of Diana. When he was in New York he saw a building called "The Tombs," which was the common gaol of the city, and it struck him that Egyptian architecture was particularly suited for that class of buildings. Mr. Wood then proposed a vote of thanks to Mr. Spiers for his admirable lecture.

Mr. Statham referred to St. George's Hall in Liverpool as one of the finest instances of the Egyptian style of architecture translated into the Greek to be seen in this country. The façade shown on one of the drawings was almost precisely of the character of that of St. George's Hall. There was the row of heavy square columns suggested by the massive character of Egyptian architecture, beyond which there was a solid stone curtain. It was intended that between each column a statue should be placed, but that had not yet been done.

After a few words from Mr. Browning upon the influence of Egyptian architecture in Greece, and its gradual development into forms of the greatest beauty, the Chairman closed the proceedings with a few appropriate observations, and the vote of thanks to Mr. Spiers was carried with cordiality.

## GREEK ART.

THE Conference of Architects was, as we briefly noted last week, occupied with the subject of Greek Art on the afternoon of Wednesday, the 14th inst. Professor E. M. Barry, R.A., presided.

Mr. W. Burges read a paper on "The Importance of the Study of Greek Art and Literature to the Practice of Gothic Architecture," which we print *in extenso* on p. 619.

Mr. R. P. Pullan followed with a paper on "Greek Art as illustrated by its Monuments." This appeared in our last (p. 584).

In inviting discussion, the Chairman said the Conference was very much indebted to the readers of the papers, and to the gentlemen who had contributed the beautiful drawings on the walls in illustration of the subject. The list of contributors included Mr. Penrose,—one of the most learned authorities on Greek architecture,—Mr. Arthur Cates, Professor Donaldson, and Professor T. Hayter Lewis, who were always ready to give help in furtherance of their art and the profession. Lastly, they had an interesting series of studies of Greek architecture by the late Professor Cockerell, whose memory would always be revered by the members of the Institute.

Mr. Phené Spiers having (as reported on p. 580 of last week's *Builder*) explained that the subject of Greek art was suggested by Mr. Fergusson's paper on the Erechtheum, read before the Institute a short time since, stated that he had forwarded to a friend of his,—a French architect,—at Athens a copy of Mr. Fergusson's paper, with the request that he would examine the building and say how far it appeared to support Mr. Fergusson's theory. His reply was that in some of the most essential points the building did not accord with Mr. Fergusson's restoration of it. This reply had been forwarded to the Honorary Secretary for Foreign Correspondence, with the view of its being published, together with Mr. Fergusson's comments thereon. He (Mr. Spiers) confessed to a somewhat Pecksniffian feeling in talking on the subject, for taking the Parthenon instead of Salisbury Cathedral, he saw drawings on the walls showing it from every conceivable point of view. When complete, the Parthenon must have been the most wonderful building ever erected. The delicate feeling for proportion which characterised it applied more or less to all Greek work.

Mr. Joseph Wood said he was reminded, on his last visit to Athens, that the beauty of the the Parthenon might be in a great measure restored by replacing some of the drums of columns which were lying at the foot of the steps. He could not agree with Mr. Burges as to the utility, to a Gothic architect, of a visit to Athens. He would not say that if a Gothic architect visited Athens it would be a waste of time, but he could not see of what practical advantage such a visit would be, seeing that the Gothic and Greek styles were so widely dissimilar. Had he known the precise turn the discussion would have taken he would have brought with him some detailed drawings of the Temple of Diana at Ephesus, especially of the sculptured drums of the columns, which were to be seen, however, in the British Museum.

Mr. Ordish, of Leicester, next made a curious speech. He said he had not long been a Fellow of the Institute; but, as holding office in the district in which he lived, he might perhaps be permitted to say one word. He was more an agriculturist than an architect at the present time; still there were times when they turned back to their old love, and when they poked about the ruins and "fiddled" about the *débris* of things to see if they could find anything out; but he was sorry to say he could make nothing out, either of Greek or of Gothic art. It appeared to him, amongst his trees and potatoes, as if the two great waves of art had gone by for ever. The magnificent minds which had put up the great buildings of antiquity had passed away, and the whole paraphernalia of their art had gone with them. Whole countries had passed away like generations. We had arrived at another age. Superstitions and idolatries had all gone, and our minds were all clothed in a new phantasmagoria, which would make us all happy. Slavery, intolerance, and superstition, the foundation of all evils, were gone, he hoped, for ever, and we were waiting for a chariot of fire which should take us away. He had followed Ruskin, Pugin, and the modern pioneers of Gothic, and such magnificent men as Mr. Cockerell and Professor Donaldson; but his advice was: follow those things which nearly everybody laid down as the foundation of our existence, and which sought to make man reverential and his life a sphere of happiness, instead of pursuing any of those chimerical notions or "rum"-shaped mouldings. A man once reviewed his works, and said he (Mr. Ordish) was "very critical." They might depend upon it that all art consisted in one thing,—in loving those things that the Creator laid before them. There was to be found the beautiful; and it might be gathered in every clime, whether upon the iceberg or in the sunshine. There were lots of things that were waiting to be won. They had a glorious arena for working in,—the whole field of Nature: so let no young man follow up the rigid deformities and rigid beauties of Greek art. Why, he remembered being excluded from the opening of a church thirty years ago because he wore a beard!

The Chairman here suggested that the speaker was hardly confining his remarks to the question before the Conference.

Mr. Ordish, in continuation, asked what was the value of Greek art to the members of the Conference, or any other art? What was to be learnt from it? He was sorry to say he should go away from the room about as ignorant as when he entered. He endorsed all that had been said in praise of the pioneers of research, such as Mr. Fergusson and others. He had read Mr. Fergusson's book with great interest, but what was the use of it? The whole subject was as delusive as the selection of architects to adjudicate upon competitions.

The Chairman again reminded Mr. Ordish that he was straying from the question, whereupon he said: I think, then, Mr. Chairman, I had better sit down, in a maze.

Mr. J. P. Seddon said the last speaker had inquired what was the use of Greek art, and he was bound to say that he thought that unless they realised that (except as a matter of education) Greek art had very little to do with modern art, it might prove a delusion and a snare to them. He had always thought and studied Greek art as being the very acme of perfection in proportion, however limited might be its aim or suitability in meeting the requirements of the present age. One could not look at the plan of a Greek temple such as the Parthenon without feeling that Greek architecture had little or nothing in common with our time and clime. We did not want the amount of shadow afforded by the peristyle; a modern building, indeed, was merely the *cella* of a Greek temple. What the Greek did was to thoroughly work out to the utmost degree of perfection the theory of the support and its entablature. He thought that a great many of the theories as to the *motif* of Greek art were far-fetched and fanciful, and had too long found acceptance. Some of them, indeed, had been, to his mind, quite disproved by M. Viollet-le-Duc, who had gone very minutely into the *rationale* of the construction of Greek architecture, as well as into its æsthetic merits. He could not agree with Mr. Pullan in considering Greek and Gothic as two opposite or distinct styles, for the latter was descended from the former by a long series of gradual and almost imperceptible changes. Gothic architects did not decry Greek art, but they did decry the manner in which it was travestied by the Romans, by means of sham orders stuck on to the faces of their buildings. Such a mode of procedure was fatal to all true architecture, no matter whether the operators were the ancient Romans or those who were responsible for much of the so-called Renaissance or other rubbish which was springing up so extensively in London and other large towns. Greek architecture was useful as a school of beauty, but the architects of the present day must bring common-sense to bear in the working out of present-day problems and architectural construction, just as the Greeks and Mediævalists did.

Mr. Charles Barry said that as far as he had gathered from what the readers of the papers had said, the lesson they wished to impress upon the Conference was that an architect in whatever age, Greek, Mediæval, or Modern, should aim at the one great object of making his buildings suitable for the purposes for which they were intended. He thought that if we in the present day were to proceed more generally upon that principle, we should be gradually working out or evolving a style which would be essentially a new style, inasmuch as it would be the result of modern wants and requirements. It was interesting to notice that both Mr. Burges and Mr. Pullan were really inculcating the same truth, but from opposite points of view. Mr. Pullan, whose name was honourably and inseparably associated with researches as to Classic architecture, had found the same principles in Gothic buildings as in Classic ones; while, on the other hand, Mr. Burges, whose name was identified with Gothic architecture, had found a certain identity of principle in the Greek temple and the Gothic cathedral. Now if gentlemen, whose views had hitherto been regarded as wide as the poles asunder, found themselves coming to agree, it proved that art was universal, and that its principles were the same all the world over. Only by liberal study of all phases of art was it possible to cherish the hope of the creation of a new style. The coming style had been talked of for years past, and would continue to be talked of for many years to come, for man was ever dissatisfied with what he had accomplished, and aspired to do something better. Such aspirations were not altogether to be condemned, for the effort to attain to something new was a wholesome exercise for the mind, notwithstanding that what was sought for constantly eluded the grasp of the seeker. The training of the mind to think for itself, combined with the study of the beautiful, could not fail to result in the production of refined and original architecture, and the very process of endeavouring to enter into the thoughts and motives which had animated the great masters who had gone before would tend to imbue the student with noble aspirations.

Mr. Watkiss Lloyd said that so many topics had been touched upon in the two papers which had been read, that he felt that he could add very little to what had been said. His own view on the thesis that the study of Greek art and literature was advantageous to the Gothic architect would perhaps rather take the direction that the student of Greek art and literature would profit by the study of Gothic architecture. There could be no doubt that the study of Greek art and literature, supposing that there was time for them, would have the same advantage for the architect as it would have for the rest of the world. Just as the provincial would usually profit by a visit to the metropolis, and just as insular views would be enlarged by foreign travel, so, in the same way, and in a still greater degree, would the modern architect have his views expanded by a careful study of Greek art. The study of the arts and literature of Greece revealed to us a people of a different race to ourselves, separated from us by thousands of years, not having the same faith as that which prevailed amongst us, and yet a race of people before whom, in many respects, we must feel humiliated. Limited as were the constructive attainments of the Greek architects, limited as were the purposes to which their buildings were devoted, yet within that range there was such a degree of art, such a lavish expenditure of thought and refinement, and such an amount of devotion to the highest imaginative purposes, as had not been rivalled since their time, whether by Gothic or any other art. He confessed that when he saw the best examples of Gothic architecture, he felt that their perfection was enhanced by the perception that they approached to the refinement of the Greeks. Standing in the noble and beautiful presbytery of Ely Cathedral, a few days ago, he felt that he was in the midst of a work of architecture which might have been produced by a Greek, and this was high praise. Looking around, he found that many of the details and outlines were of a character which a Greek might have improved upon; but, nevertheless, the general spirit of the whole was that of Greek architecture. When he heard Gothic architecture contrasted with Greek, or Greek with Gothic, to the disadvantage of one or the other, he was reminded of the anecdote of the American boy, who, when he discovered that his father was born in England, exclaimed, "Didn't we lick you at Bunker's Hill!" Gothic architecture was the descendant of Greek architecture, by a long series of gradual changes. There was no breach in the continuity of the chain, although sometimes great strides had been made by men of great genius. Gothic architecture was as much the descendant of Greek art as the French and Italian languages had descended from the ancient Latin. He did not think that a new style was an impossibility, and the restlessness and love of variety which were now apparent on every hand seemed to betoken a feeling after a new style.

Mr. A. J. Hiscocks said that he had long been a great admirer of Greek art, and he should be sorry indeed if any observations made that evening had the effect of depreciating the value of its study to young architects. One great misfortune was that there were no examples of private dwelling-houses remaining to show what the domestic architecture of the Greeks was like. But, notwithstanding all that might be learned from the study of Greek architecture, we did not want to make slavish copies of Greek buildings, either for domestic purposes or for our abodes. He envied those who had had the good fortune to go to Athens, for there must be something very august about the appearance of a Greek temple, even when in ruins. Whatever might be thought of the chances of a Greek revival, we should probably never go back to the Egyptian style, unless, indeed, for such buildings as prisons. Much as it was the fashion to detract from the style of the present day,—"Victorian," or whatsoever it might be called, it evinced great study of Greek and Italian art.

Mr. H. H. Statham said, in the course of an interesting speech, he wished to refer to a point which occurred in the early part of the discussion. It was remarked by Mr. Pullan, in his paper, that the Gothic and Greek camps were now somewhat strangely mixed up, the one using the arms of the other. There was a curious illustration of that afforded by the present discussion. Mr. Burges, a consistent follower of Gothic during his whole life, advised young men to study Greek art; while Mr. Wood, whose name was identified with Greek architecture, said it would do no good to Gothic architects. A great deal had been said about Greek and Gothic being the only pure styles, but this assumption was generally taken for granted without any clear perception of the reason why. Greek and Gothic were the only two pure styles, because they were the only two which had complete systems of construction throughout, and because they were the only two in which the design completely expressed the construction in every point. He took it that Mr. Burges's advice to study Greek art as well as Gothic, was intended to have the effect of enabling Gothic to be treated with greater freedom, and so to cause it to be applied more successfully to the wants of the present day.

Mr. Arthur Cates said that every lover of Greek art must be grateful to Mr. Burges for the manner in which he had done honour to it, for he had called attention to points which even its professed admirers generally overlooked. Greek art was, perhaps, the most picturesque and the most free from trammels. It adapted itself to varying circumstances with great readiness, and the display of its productions in the best possible manner was not hindered by rigid rules of symmetry, while at the same time devoid of what might be called licence. He thought it might be taken as a fact that almost every group of Greek monumental edifices was surrounded by a peribolus or wall, and that the buildings were not invariably set upon fixed lines or bases. In the buildings on the Acropolis the axes of no two were precisely parallel, although they were all, apparently, in the same direction. Very much of the discredit into which the Classic style had fallen had arisen from the manner in which it had been represented as being bound by inflexible and unyielding rules. A more intimate acquaintance with Classic art, however, would show that it was capable of being worked in with as great an amount of freedom as any other style. Familiar as a man might be with the Parthenon, the Erechtheum, and the other monuments on the Acropolis, by means of pictorial representations, those representations, however correct and beautiful, must necessarily fail to adequately convey the effect which such structures had on the beholder. To fully appreciate Greek architecture its buildings must be studied on the spot. Whatever might be the aim of the architect, whether he intended to devote himself exclusively to the practice of either the Gothic or the Renaissance styles, a few weeks spent in the careful study of the buildings of the Acropolis would expand his mind and ennoble his artistic feelings in a remarkable degree. The importance of the careful study of Greek architecture was strikingly evinced by the inspection of a new building lately erected in Athens itself, viz., the Academy of the Fine Arts. The building had been erected from a design by Mr. Theophilus Hansen, an eminent architect at Vienna, assisted by Mr. Ziller. It had been built regardless of expense, and the materials and workmanship were of the best possible description. Nevertheless, from the simple fact that the building had been designed as we generally considered Classic buildings should be designed, viz., in a rectangular manner, the effect was most distressing, the distortion of the lines being something startling, especially under a brilliant sun. A careful examination of this building* on the spot was quite sufficient to justify the Greeks in the use of the entasis. Here was a building admirably executed, in the same material and style, and in the same climate, as the Greek temples of antiquity. On paper, the design appeared to be perfect, but in execution it was to the extent named a great failure, owing to the non-observance of a principle with which the Greeks were well acquainted. Archæologically, it was to be regretted that all traces of Greek domestic work had passed away, but artistically it was not to be regretted, inasmuch as it saved us from being surrounded with imitation Greek dwelling-houses. Mr. Pullan had said that order was an essential element of every style; but how would he limit the picturesque architecture of Mediæval times to the strict rules of order?

Mr. Pullan explained that what he meant by "order" was the subordination of the general features of the design to some common general scheme of plan.

The Chairman, in closing the discussion, congratulated the Conference on the discussion, as well as on the paper which had been read. He confessed that it was a great satisfaction to him to find a gentleman of Mr. Burges's eminence and well-known proclivities meeting Mr. Pullan and uniting with him in the endeavour to find some common ground between Classic and Gothic art,—a *modus vivendi*, in fact. He believed that a recognition of the catholicity of the principles of beauty would enable both styles to be more intelligently studied and more thoroughly appreciated. *Primâ facie*, it might be assumed that, when a building had received the admiration of ages, and when it had been the subject of enthusiastic praise by all classes of educated men, there must be something in it worthy of careful attention and study, if not of direct imitation, for without servilely imitating Greek art we might learn many valuable lessons from its simplicity, refinement, and suitability to its purpose,—lessons which might be advantageously applied in every-day practice. To go to Athens was not within the power of everybody, and when they got there the remains were found to be greatly mutilated, for when we talked of "Vandalism" we ought to remember the Elgin marbles in the British museum. Therefore if the architect wanted to study the sculptured forms and details of Greek art, he could perhaps do so more advantageously in the British Museum than at Athens itself. Some Ionic capitals there would well repay study on account of their extreme delicacy, as they afforded a lesson which should not be lost upon us in the present day, when there was such a tendency to coarseness of detail and roughness of execution. He agreed with Mr. Burges that to talk of a man inventing a new style was to talk nonsense. If a new style were to rise, it would grow gradually from definite principles derived from the works of antiquity, and applied in a common-sense manner to the requirements of the day. He should be very sorry to enrol himself on the list of votaries of that somewhat dismal philosophy which taught that nothing good remained to be done in architecture, and that we were to content ourselves by studying and admiring nature. They would get a new style, not by talking about it, nor by trying to be original, but by applying true principles with intelligence and common sense. It was related of Turner that he was once very much annoyed by some youngster asking questions as to the "vehicle" with which he mixed his colours, and he replied "Brains!" That was the vehicle which architects must use if they

* Described in January last in the *Builder*, page 1, *ante*.

were to be successful in making their buildings useful as well as beautiful. Refinement and perfection of detail were especially to be commended. It was impossible to look at a Greek temple without feeling that its architect left nothing to chance, and did not shirk his work in the slightest degree. Every moulding was designed with special reference to its place. When we perceived the beauties of old work, and were told on every hand that we could do nothing in these days, we were rather apt to indulge in feelings of despair. We found that Greece,—that small and favoured land,—gave lessons to all classes, statesmen, poets, philosophers, artists, and architects. But all that was not sufficient to maintain Greece in its palmy state. Where was Greece now? Unfortunately in a very different condition to that in which we could wish to see her, as a consequence of her artistic virtues. There was evidently something else wanting, and it was for us to say whether we, in the nineteenth century, could not supply what was needed, while availing ourselves to the full of all the experience of the past.

## DWELLINGS IN FLATS FOR THE MIDDLE AND LABOURING CLASSES.

IN connexion with the recent Conference of Architects, visits were paid on Tuesday, the 13th inst., to the following blocks of buildings, viz., Mr. Matthew Allen's dwellings in flats for the middle classes, Manor-road and Bethune-road, Stoke Newington; the Improved Industrial Dwellings Company's buildings at Bethnal-green Junction; and the new buildings lately erected in Southwark-street, by the Trustees of the Peabody Fund.

The visitors first proceeded to Stoke Newington, where they were received by Mr. Allen and conducted over the buildings. Mr. Allen stated that for several years past he has turned his attention to the subject of the improvement of middle-class suburban dwellings, and has recently carried out an experiment on a somewhat large scale in Manor and Bethune Roads, Stoke Newington. This experiment may be said to have been so far successful that the majority of the houses, twenty-four in number, were let before they were completed. The twenty-four houses, which are divided into six blocks, vary in rent from 20*l.* to 60*l.* per annum. They are built on the "flat" principle, but each house has a separate entrance, and is entirely distinct from its neighbour in every respect. Of the twelve houses on the ground floor, eight let at 20*l.* per annum, and contain five rooms, with lobby entrance, lavatory, coal-cellar, larder, and other conveniences. Above these are eight 40*l.* houses, containing nine rooms, occupying two floors, and fitted with bath-room,—which is supplied with hot, cold, and soft water,—lavatory, hot closet, conservatory, &c. There are four 35*l.* houses, which have seven rooms on the ground-floor, fitted with every convenience. Besides the garden in front, there is a large croquet-lawn in the rear, which is approached from the drawing-room by means of a French casement. Above these four houses are four 60*l.* houses, each of which contains thirteen rooms, and is fitted with bath-room, and other conveniences. These have also a lawn in the rear, approached by steps from a balcony or verandah. Beyond the croquet lawns is a long gravelled walk, having on one side flower borders, and on the other side lean-to greenhouses, vineries, &c. Behind the wall of the greenhouses are the gardener's cottage, potting sheds, coach-house and stables; and in a line with these is a row of wash-houses (one for each tenant) fitted with washing coppers, troughs, &c. The roofs of the washhouses are flat, and they form a long terrace walk with steps at each end. In addition to the croquet lawns, there is a long bowling-green, skirted by flower borders and a row of standard roses, and a large playground for the children. All the tenants pay a small sum quarterly in addition to the rent, for the keeping in order of the grounds, which require about 10,000 bedding plants annually. In the centre of one of the vineries is a large garden-room, which is much frequented by the tenants, and being provided with a pianoforte, is used at stated intervals for dancing and evening entertainments of various kinds. Above the garden-room is a billiard-room, under the management of a committee of the tenants, who also regulate the affairs of the garden-room. The kitchen-garden, in the rear of the vineries and greenhouses, is about 1 acre in extent. All the tenants have free access to it, and they can purchase any of its produce on application to the gardener, who calls at every house daily for orders.

The arrangement of the buildings, as regards the number of rooms on each floor, are partly upon the Scottish principle; whilst the laying out of the grounds is after the French system; but Mr. Allen claims to have retained the all important feature of an English home,—perfect privacy. The ceilings between each flat being constructed of concrete with iron joists running through the centre of the same, are fireproof. It is stated that little or no sound penetrates through from floor to floor.

Such was the success which attended this experiment, that in the summer of 1874 Mr. Allen commenced the erection of two more blocks, comprising eight houses, on an adjoining estate, and they were nearly all occupied as soon as completed. Last summer he erected two additional blocks, and those houses which have been completed are already occupied. These last two blocks have been designed with certain modifications of the original plan, and several important improvements. Each block consists of six houses instead of four, and there are eight rooms in each house, which comprises one "flat." There is a separate entrance with lobby for each house, and the drawing-rooms are 22 ft. by 13 ft., a size which is somewhat larger than those of the original plans. The rent of the bottom and top houses is 40*l.* per annum each, and the intermediate or first-floor houses, pay 47*l.* per annum, and have the exclusive use of the vineries and greenhouses in the garden. All the tenants pay their own rates and taxes. No wood is used in the construction of the carcasses of any of the houses, and where iron is employed it is always embedded in concrete. The party and external walls are 14 in. thick, and the lintels, ceilings, roofs, and staircases are all formed of Mr. Allen's artificial stone. This material is fire-proof. An important point with regard to the footings is that the ground is taken out to a depth of 2 ft. below the intended floor line, and to a depth of 3 ft. where the foundations are to be laid, the whole of the space being afterwards filled in with concrete, and covered with a mixture of pitch, tar, and sand. In the two last blocks extra precautions have been taken against damp, by building the first 2 ft. of the external walls in the following manner:—2 ft. of 9 in. work on the inside, and slabs of artificial stone 3 in. thick, and projecting three-quarters of an inch beyond the face of the upper wall, on the outside, leaving an open space of 2 in. between the brickwork and the slabs. The whole is surmounted with air-bricks, thus allowing free circulation of air around the bottom part of the building and under the flooring. There are no drains under any part of the buildings.

Each block of buildings is surrounded by a footway paved with artificial stone, and this prevents the objectionable practice of planting flowers and shrubs against the external wall. By this mode of arrangement the walls are kept perfectly dry, and strength and durability are given to the foundations of the buildings. All the internal partitions are constructed of brickwork,—not a lath being used in any part of the buildings; and the ceilings being composed of artificial stone, as before stated, there are no snug places in which mice and other vermin can breed.

The visitors next proceeded to the large blocks of buildings in course of erection at Finnis-street, Bethnal-green, for the Improved Industrial Dwellings Company, under the direction of Mr. William Ward Lee. The buildings occupy both sides of the street, which is 45 ft. wide, the height of the buildings from the ground-line to the top of the parapet being 53 ft. There are fifteen blocks on one side of the street, and six on the other side, which is partly occupied by a Board school. The blocks (except, of course, those on opposite sides of the street) are not detached, being merely divided from each other by party walls. Each block is five stories high, with two tenements on each floor, making a total of ten tenements per block. The tenements vary in size from two to four rooms, besides sculleries. The rents vary from about 5*s.* 6*d.* to 8*s.* 9*d.* per week per tenement. Coal-bunkers, larders, dust-shoots, and other conveniences are provided, and the water-closets are placed outside the tenements in a sort of recessed balcony open to the external air, each tenement having its own water-closet, only approachable by the tenant. Playgrounds for children are provided in the rear. Each tenement contains within itself (in the scullery) a copper and other accommodation for washing. The company are their own builders, Mr. G. H. Gilbam being the clerk of the works, and Mr. William Smith, the foreman.

For want of time very few of the visitors went to the Peabody-buildings in Southwark-street, of which we need say no more than that they differ very slightly, if at all, from those at Pimlico lately described by us. Mr. Darbishire is the architect. Each set of buildings is excellently built, both as regards materials and workmanship; but in neither case do they provide a separate water-closet for each tenement, one water-closet being used in common by two or more tenants,—an objectionable arrangement, as we have already urged.

## LONDON STREET ARCHITECTURE.

QUEEN ANNE CHAMBERS, No. 1, Poultry, which forms the subject of our illustration, has been erected from the designs of Messrs. J. & J. Belcher, and, under their superintendence, by Mr. William Downs, of Walworth, who has well carried out the architects' designs.

The Chambers have three frontages, one towards the Poultry, the centre one facing Cheapside, and the third towards Bucklersbury. They are built of red bricks, with green slates and red tiles for the roof. The bay windows and dormers form the chief features in the composition, requiring a varied sky-line, and strongly marked lines, as the building is seen from a considerable distance.

It may be taken as a specimen of a fashion which can scarcely have a very long reign.

## NEW HOTEL AND SHOPS OPPOSITE TO THE CENTRAL RAILWAY STATION, NEWCASTLE-ON-TYNE.

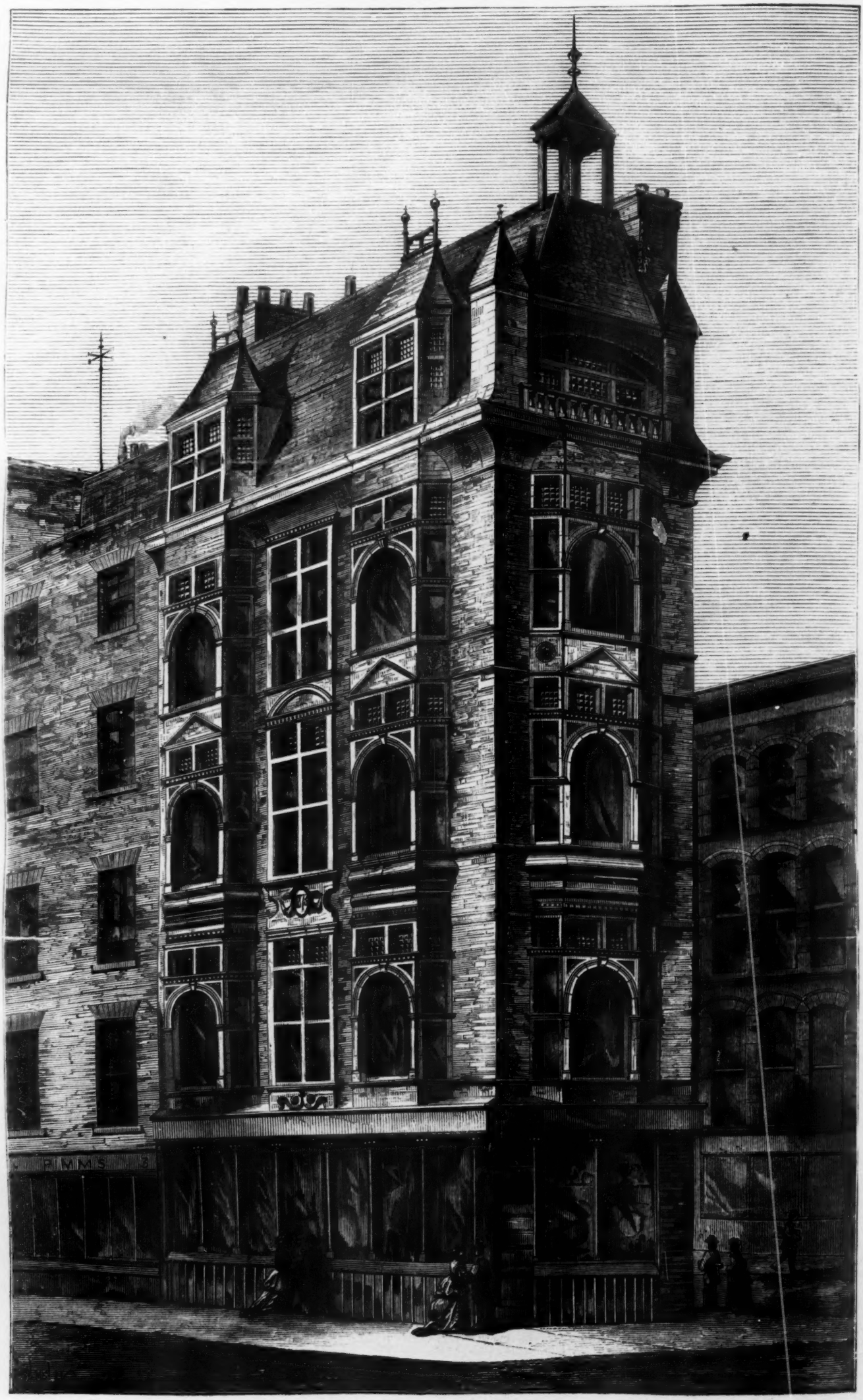
THE block of buildings now in course of completion immediately opposite the Central Station, and situate in the most commanding position in the town, has three fronts,—that in Grainger-street West is 150 ft., in Neville-street, 64 ft., and in Westgate-road, 46 ft. in length, each being a leading thoroughfare from the railway station to the centre of the main business parts of the town. Grainger-street West is a new street nearly completed, and from its position is necessarily much thronged with business, and when finished will be one of the handsomest in the town. The whole of the building is cellared, which also extends under the footpath and flagging in Grainger-street West and Neville-street, and contains an area of about 9,000 superficial feet, which can be adapted for the use of the hotel and shops. Ample room is also left for a large restaurant, extending from Neville-street to Westgate-road, well lighted and ventilated, and a licence is already attached.

The ground-plan consists of eight spacious shops and conveniences, situated in Grainger-street West, Neville-street, and Westgate-road. The hotel extends over the whole area, from the first floor upwards. The entrance will be from the centre of the block in Grainger-street West, the doorway being a distinguishing and prominent feature in the building. There is a spacious entrance on the ground floor, leading to a circular stone staircase, 18 ft. in diameter, lighted by a large cupola, which will also be used as a means of ventilation; there is also a servants' staircase. A separate entrance is intended in Westgate-road, leading to a large bar on the ground floor. The first floor of the hotel comprises a large coffee-room, ladies' coffee-room, four private sitting-rooms, billiard-room, smoke-room, bar, private room or office, and seven beautiful bedrooms, also water-closets, lavatories, &c., well lighted and ventilated by an open area, which has an air-shaft brought into them at the basement story, to create a good circulation of fresh air.

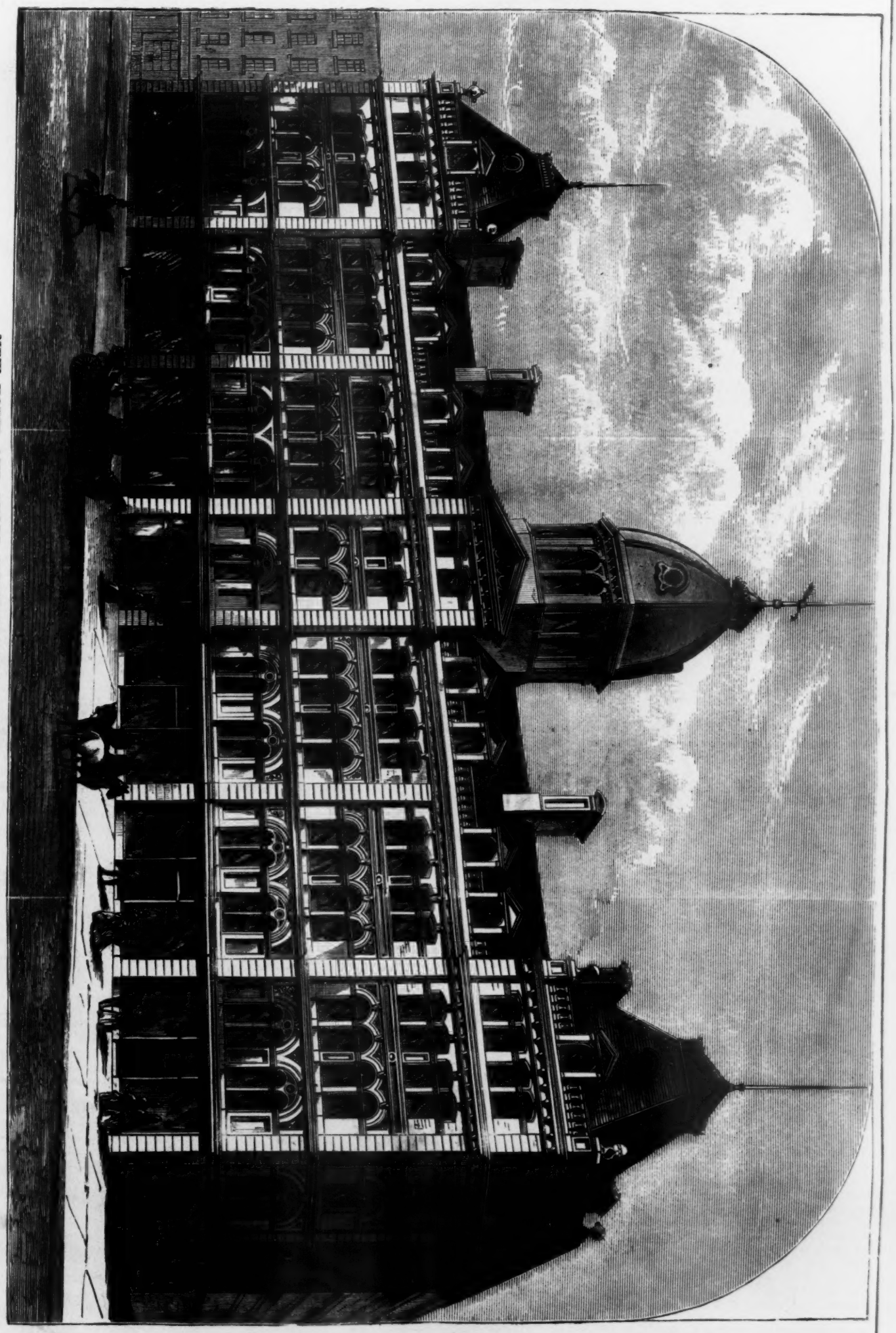
The second floor contains two sitting-rooms, and eighteen spacious bedrooms, bath-room, water-closets and lavatories, and other conveniences.

The third floor contains twenty-one spacious bedrooms, bath-rooms, water-closets, lavatories, and all other conveniences suitable to a first-class hotel.

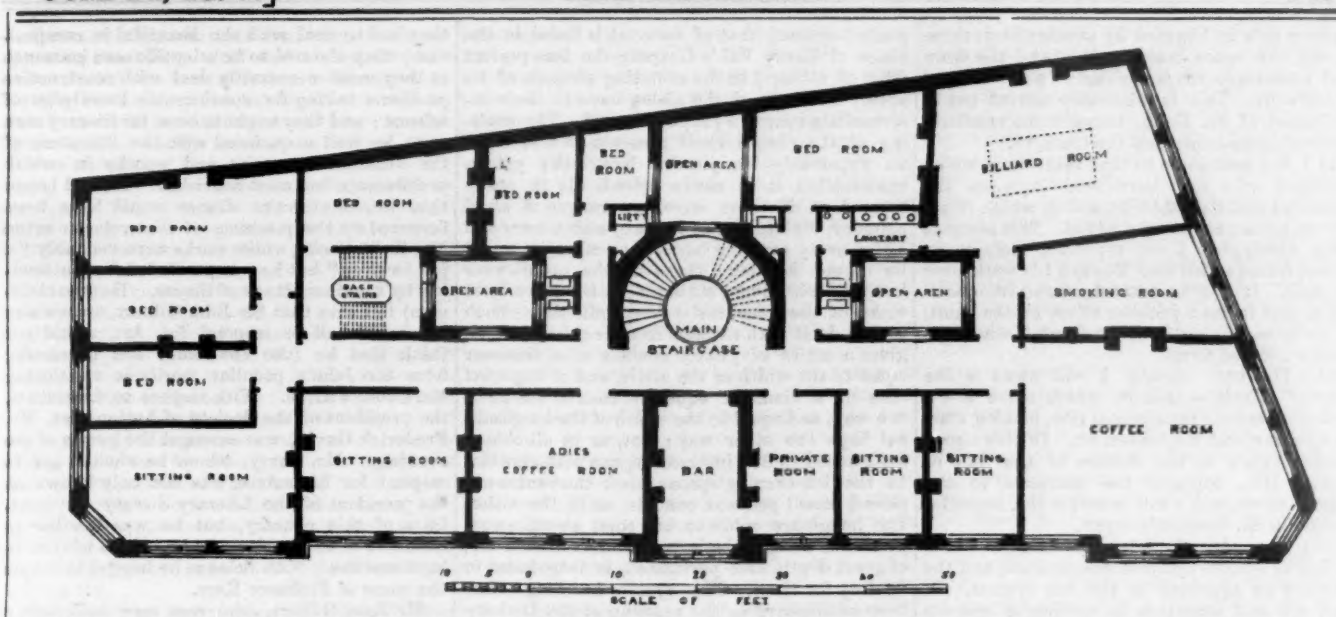
The fourth floor contains a large kitchen, 25 ft. square, situate in the angle of Grainger-street West and Westgate-road, the ceiling of which will be carried up to the high roof, to give space and ventilation; there are also sculleries, larders, pantries, and every other con-



LONDON STREET ARCHITECTURE: QUEEN ANNE CHAMBERS, POULTRY.——MESSRS. BELCHER, ARCHITECTS.



NEW HOTEL AND SHOPS, NEWCASTLE-ON-TYNE.—MR. J. E. WATSON, ARCHITECT.




HOTEL AND SHOPS NEAR CENTRAL RAILWAY STATION, NEWCASTLE-ON-TYNE.——*Plan of First Floor.*

venience suitable to the hotel. There are also eight good bedrooms for servants, and a servants' hall, and six excellent bedrooms, entirely shut off and distinct from the servants' apartments.

A lift will be constructed from the basement to the different floors for luggage, coals, and for the supply of all requisites necessary for culinary purposes, and is very suitably situated in the centre of the buildings.

The elevation is of polished ashlar work, with carved caps, panels, spandrels, &c.; the roofs are high-pitched, with cupola in the centre for light to the staircase, which, with the roofs, make a bold broken sky outline.

The building is being erected by Mr. Walter Scott, contractor, for Messrs. Gibson & Scott, the proprietors, from the designs of Mr. J. E. Watson, architect, Newcastle.

## SIR GILBERT SCOTT ON WESTMINSTER ABBEY.

As was briefly recorded in last week's *Builder*, the gentlemen attending the Architectural Conference visited Westminster Abbey on Thursday, the 15th inst., when Sir G. G. Scott, R.A., delivered the following address in the Chapter-house:—

On the last occasion I had the pleasure of addressing the Architectural Congress in this Chapter-house, as a preliminary to their going the round of our glorious old abbey, I recollect pointing out that with exceedingly few exceptions there would be found in the Abbey specimens—and those of a high class—of every phase of Mediæval art from the eleventh to the sixteenth century inclusive. I may amplify this by saying that, though London would hardly be viewed by a stranger as a place especially fitted for the study of Mediæval art, it yet contains—mainly in the Abbey, but well supplemented by other buildings—as perfect and as fine a series of studies of every style as any city which can be named. As for instance:—

(1.) *Of Norman architecture, anterior in date to the Norman Conquest*, we have King Edward the Confessor's work at this Abbey.

(2.) *Of Norman architecture of the time of the Conqueror* we have the keep and chapel of the Tower of London,—the work of the Episcopal architect, Bishop Gundulph.

(3.) *Of advanced yet still pure Norman architecture*, we have our ruined Chapel of St. Catherine, Prior Rahere's noble work at St. Bartholomew's Priory in Smithfield; and we have also the fragments of our own Norman cloisters ranged in the vestibule of this Chapter-house.

(4.) *Of Transitional architecture*, though absent here, we have a noble example in the Round of the Temple Church, and a more obscure one in the crypt of the Church of St. John of Jerusalem.

(5.) Of genuine, *developed Early English*, we have noble specimens in the eastern part of the Temple Church; in the choir and lady-chapel of St. Mary's, Overy; and in the chapel of Lambeth Palace.

(6.) *Of the Second Transition,—that from Early Pointed to Decorated*,—I need only say, "*Si monumentum requiris circumspice.*" This abbey is the earliest and best example of the style in this country.

(7.) *Of the more developed Early Decorated*, I may say we have a noble specimen in the actual choir of this church, erected by Edward I.; but, as its architecture was greatly influenced by earlier work, I may also refer to the noble Chapel of St. Etheldreda, in Ely-place, Holborn.

(8.) Of Italian Gothic of these periods we may refer you to St. Edward's Shrine, the Tomb of King Henry III., and some minor works. I may also refer for *Monuments* of the Early Decorated style to those of Edmund, Earl of Lancaster, and his countess, Abeline, as fine works as exist.

(9.) For the *Later Decorated* I may refer you to three bays of the adjoining cloister, opposite the entrance of this chapter-house, and, not far off, to the crypt (would that its superstructure remained!) of St. Stephen's Chapel; and, for a later example, to the church of Austin Friars, in the City.

(10.) For the *Earliest Perpendicular* (our own nave being too much influenced by earlier architecture) I need go no further than the south and west walks of our cloister, and our noble neighbour, Westminster Hall.

(11.) Of the "*Perpendicular*" *works of the fifteenth century* we have not very numerous remains of a striking character, yet minor specimens are abundant. I may especially mention the chapel of King Henry V., and the altar-screen carried out in the time of Henry VI.

(12.) When we arrive at the *Perpendicular of the sixteenth century* we are rich indeed; and I need only allude to that "*orbis miraculum*," Henry VII.'s Chapel, and the exquisite double cloister of St. Stephen's, over the way.

(13.) Of the earliest *Renaissance*, I may refer to the wonderful examples by Torrigiano, in the tombs of Henry VII. and his mother, the Countess of Richmond; (14) and of its more nationalised form, to the hall of the Middle Temple.

In the above *catena* I have, I believe, repeated in substance what I said on a previous occasion; but for the present I have bethought myself of another *catena* which our abbey offers, almost single-handed, for our study, in that it contains, *with a single exception*, probably all the main varieties of Mediæval *vaulting*, and is, perhaps, the best building in England for the study of that right noble art. Thus,—

(1.) We have among our earliest works, the buildings of Edward the Confessor, two instances of the plain wagon-vault, a form repeated rather later in the chapel of the Tower of London, and we have among our latest works an example of the same in its most decorative form, in the vestibule to Henry VII.'s Chapel.

(2.) We possess beneath the dormitory (also of the Confessor's date) the simplest form of square vaulting with only transverse ribs. Of this, I may mention that the Priory Church of St. Bartholomew contains later examples.

(3.) Here comes our *one hiátus*, and one which I do not recollect that London supplements,—*the square Norman vaulting with diagonal ribs.*

(4.) Next comes the Pointed vaulting, with only transverse and diagonal ribs. Of this the Abbey contains very many specimens, in its aisles, the early parts of the cloister, and in the vestibule to this chapter-house.

(5.) Next is that which adds to the above, the ridge rib at least, in one direction, as our presbytery and transepts.

(6.) Next I may mention the extremely oblique groining of the bays of the aisle surrounding the apse.

(7.) Of the same date we have the simplest forms of polygonal vaulting, as in the apse and apsidal chapels,—the polygon not being perfect, yet the principle the same as if they were so.

(8.) This brings us to the great octagonal vault under whose canopy we are now assembled. It is *new*, yet worked accurately from the springers of the ancient vaulting, and one can hardly conceive of a scheme more perfect, though it is not easy to conceive of any other solution of the problem. It had been solved a century earlier at Worcester, both in the chapter-house, and less perfectly in the crypt. You will see that it is a perfect mathematical development of mere ordinary groining. There are, first, simple arched ribs from every angle of the octagon to its central column. These are the *transverse* ribs. The *diagonal* ribs necessarily bisect the angles which these form at the centre; and on reaching the central point of the triangles which the transverse ribs had formed, they are met by similar ribs from the angles of the octagon. This really completes the scheme, for the vaulted surfaces between these ribs form their own ridge-lines, which are not emphasised by mouldings. Had they been so, a second octagon would be described round the central pillar at half the distance to the angles, but in a position *reversing* that of the main octagon.

(9.) The next principle of vaulting I will mention is what has received the very apt appellation of "*Plough-share*" vaulting. This is very extensively used throughout. It is simply this:—That when windows nearly or quite as wide as a vaulted compartment have the springing lines to their arches higher than that of the vaulting, it is necessary that the compartment or cell which abuts against the wall must have vertical sides a certain distance up from the springing of the vaulting. This is effected by producing the plane of the side of the diagonal rib till it intersects with the wall as high up as the springing of the window arch. The vaulting surface has consequently to *wind*, or *twist*, like a plough-share. This will be seen in all the clearstories and elsewhere, beautifully carried out.

(10.) The next variety of vaulting which we have is what Professor Willis called the "*Sexpartite*" vault, or that in which one of the four natural divisions of an ordinary groined vault

on either side is bisected by another transverse rib, and the space between this and the more usual transverse rib is divided into two oblique vaulted cells. This is admirably carried out in the Chapel of St. Faith, between the vestibule of this chapter-house and the transept.

(11.) We next come to that vaulting in which *additional ribs* are introduced between the transverse and diagonal ribs, and in which ridge-ribs are almost necessarily added. This abounds in the Abbey, but I will especially mention its earliest introduction into Edward I.'s work over the choir. It will be noticed, on careful examination, that it has a peculiar effect on the vaulting surfaces, giving their horizontal sections a peculiar *notched* form.

(12.) The next variety I will name is the "*Lierne*" *Vault*, —that in which there are a number of merely ornamental ribs, making star-like figures round the bosses, &c. Of this a good example exists in the cloister of the time of Edward III., opposite the entrance to the Chapter-house, and I will mention the beautiful example in St. Stephen's crypt.

(13.) Examples of a later date exist, in which the *Lierne* system becomes complicated, and the ribs show an approach to the *fan* system. Of this I will call attention to specimens beneath the Chapel of Henry V., and in the Chapel of Abbot Islip.

Lastly, I arrive at the latest development of Gothic vaulting in this country,—the true *fan vaulting*. This is so peculiar and so new a system that it is not easy to define it clearly. Professor Willis, in an excellent paper on the groining of the cloisters at Norwich, has shown how the different bays of that cloister gradually approach that system by the horizontal sections of the groups of ribs gradually diverging from the *square* towards the *circle*. We often find this approach to circular radiation without the *actual fan* being reached. The fan-vault may be described as consisting of a series of concave-sided conoids springing from shafts and touching one another in their upper circles; the intervals being filled in with ornamental devices of tracery. Its actual introduction was approached by gradual and tentative measures; yet when attained it is so perfect a geometrical principle that one would imagine it to have been conceived *at once* as a single and perfect thought. Strange to say, it was foreshadowed some three centuries before it was actually developed; and we have at this moment over our heads its early foreshadowment. The sixteen ribs branching out from the central pillar of this chapter-house, and similarly from the much earlier one at Worcester, display the fan system as truly as any work of the fifteenth or sixteenth century; yet, so far as one can judge, the hint was not taken from a suggestion apparently so obvious. Had this chapter-house been *hexagonal* instead of *octagonal*, it might have had a perfect fan-groin without necessarily altering its existing central conoid. A space of indefinite size, but divided into exact squares, with a pillar at each of their intersecting angles, may be covered by an indefinite number of such conoids as this rising from each pillar, and their intervals filled in in some appropriate manner. It would seem from this that the system is applicable to *all styles*, from that of the Norman chapter-house at Worcester on to the latest form of Gothic, or even to other styles; yet, as a matter of fact, it is only associated with the Perpendicular style, first appearing, perhaps, in the cloisters at Gloucester towards the end of the fourteenth century, only becoming general a century later, and having its fullest development in Henry VII.'s chapel. It may be mentioned that the multiplicity of the ribs and tracery rendered it necessary to cut them out of the *solid*, so that the system would be equally perfect in construction without ribs, mere smooth conoids; but that its beauty rather arises from these features, which are purely ornamental appendages than necessary elements. An ordinary *square* compartment,—fan-groined,—consists of four quarter conoids meeting at the centres of the sides. Its plan is, therefore, drawn by describing four quadrants from the angle of the square with a radius of half the side, and then adding the ribs, &c., at pleasure. Each quadrant, however, usually has four or eight radials. The intervening space is filled in with a circle of tracery or other device. An *oblong*-planned compartment has similar quadrants or quarter conoids in its angles, but as these do not fill the longer sides, a second circle is drawn from the same centre, and with a radius of half the longer side boundary conoids of larger size which intersect with one another, and are imperfect. The more perfect system (that of *squares*) is found in the aisles of Henry VII.'s Chapel; the less perfect (that of *oblongs*) in the radiating chapels of its apse. The bays of the aisles have in their intermediate spaces a pendent conoid. The vaulting of the chapel itself presents at first sight an apparently inexplicable labyrinth; yet on examination it is easily solved. It is really treated as if there were two ranges of small columns, dividing it, as it were, with a *nave* and *aisles*, every groining bay of each of which would be *oblong* in plan; those of the quasi-*nave* having their longer sides placed *transversely* to those of the quasi-*aisles longitudinally*. Each is then dealt with as described for oblongs. This gives a series of *perfect* conoids of a diameter equal to the width of the *aisles*, and of *imperfect* ones of a diameter equal to that of the *nave*, one way, and equal to the width of the longitudinal bays the other way; but, as in all oblong fan-groined vaults, intersecting one with another. In the intervening spaces down the centre are placed small pendent conoids, as in the aisles. The imaginary columns are then swept away, pendants being substituted, and an arched rib, of great depth, and perforated, is introduced to do duty for them. This system had long before been anticipated in the vaulting at the Divinity School at Oxford, but it was reserved for Henry VII. to carry it out in full perfection. The apse has a somewhat similar system carried out with a portion of an octagon. It would form a perfect system of fan-vaulting for an octagon without a central pillar, but with a series of small pillars in each diagonal line, each carrying a conoid of such a size as exactly to meet each other, with a portion of a conoid rising from each angle and meeting the main conoids. The imaginary pillars are then, as in the body of the chapel, omitted, and a perforated rib made to do duty for them. The whole forms a perfect marvel of construction; at first sight inexplicable, yet, when unravelled, *perfect* and *systematic*, and of most wonderful beauty.

## THE INSTITUTE CONFERENCE DINNER.

THE proceedings of the General Conference of Architects, reported at length in this and the last number of the *Builder*, were brought to a conclusion by the dinner of the Institute at St. James's Hall, Regent-street, on Friday in last week. Mr. Charles Barry, F.S.A., president of the Institute, was in the chair, and the company included the Right Hon. the Lord Mayor, M.P.; Mr. A. J. B. Beresford-Hope, M.P.; Sir George Gilbert Scott, R.A.; Professor E. M. Barry, R.A.; Sir John Gilbert, R.A.; Major-General Scott, R.E., C.B.; Professor Poynter, A.R.A.; Mr. Henry Bessemer, F.R.S.; Professor Kerr, Canon Barry, Mr. T. H. Wyatt, Mr. F. Ouvry (president of the Society of Antiquaries), Mr. W. Burges, Mr. J. Douglass Mathews, Mr. J. Whichcord, Mr. Talbot Bury, Mr. H. Currey, Mr. Horace Jones (the City Architect), Mr. John Honeyman, Mr. F. P. Cockerell, Mr. C. L. Eastlake, Mr. C. H. Cooke, Mr. Octavius Hansard, Mr. Alma Tadema, A.R.A., Sir E. H. Currie, Mr. J. Drew, Mr. J. Ross, Mr. A. J. Hiscocks, Mr. J. Gibson, Mr. J. M. Anderson, Mr. R. P. Pullan, and other gentlemen, to the number of between ninety and a hundred. The usual loyal toasts having been duly honoured,

The Chairman proposed "The Army, Navy, and Reserve Forces," coupled with the names of General Scott, R.E., and Captain Hayward, of Exeter, remarking that there was a peculiar appropriateness in calling upon General Scott to reply on behalf of the army and navy, seeing that his training was not alone confined to the service with which his name, rank, and honours, were chiefly identified, for he had attained to some distinction as an architect.

Major-General Scott, in responding, said that there was a time when the profession which gave the name to the corps in which he had the honour to serve was included within the domain of the architect. Michelangelo, Sangallo, and Leonardo da Vinci, were not only architects, but most distinguished engineers. Architects were, as a rule, men of peace; but he was sure that, whenever occasion might arise, they would turn engineers for the defence of their country, and throw aside the trowel and the hod (!) for the pickaxe and shovel.

Captain Hayward having briefly replied on behalf of the "Reserve Forces,"

The Chairman next proposed the toast of "Art, Science, and Literature." He remarked that architects claimed to be artists inasmuch as they had to deal with the beautiful in composition; they claimed to be scientific men inasmuch as they must necessarily deal with constructive problems calling for considerable knowledge of science; and they ought to be so far literary men as to be well acquainted with the literature of the different countries and epochs in which architecture had most flourished. He had hoped that the Conference dinner would have been favoured by the presence of that veteran artist Mr. E. W. Cooke, whose works were veritably "a joy for ever," but he was precluded from attending by a serious attack of illness. He (the chairman) felt sure that Sir John Gilbert, upon whom he should call to respond for Art, would not think that he (the chairman) was detracting from Sir John's peculiar merits in mentioning Mr. Cooke's name. With respect to Literature, the president of the Society of Antiquaries, Mr. Frederick Ouvry, was amongst the guests of the evening. Mr. Ouvry, whom he should ask to respond for Literature, was not only known as the president of the Literary Society *par excellence* of this country, but he was familiar to members of the Institute as its valued adviser in legal matters. With Science he begged to couple the name of Professor Kerr.

Sir John Gilbert, who was very indistinctly heard at the reporters' table, briefly responded on behalf of Art. He was understood to say that he could have wished that the name of some artist more renowned than himself, and more entitled to the honour, had been associated with the toast. He could only thank the company for the manner in which they had received the toast, for it was not necessary, in such an assembly as he was addressing, for him to enlarge upon Art. He looked upon the toast as a graceful tribute paid to the painters and sculptors by their brother-artists the architects.

Mr. Ouvry also briefly responded, remarking that he looked upon the association of his name with the toast as a tribute to his official position as President of the Society of Antiquaries.

Professor Kerr, in responding for Science, said that as regarded the interest which attached to science in connexion with architectural pursuits, he need hardly say a word. He had been connected, in a humble way, with the teaching of science in connexion with architecture and civil engineering for a considerable number of years, and he could only say this,—that the more he had taught, the more he had learnt; and the more convinced had he become that the architectural profession will pursue the right course during the next age if it will devote itself assiduously to the cultivation of science. The architects of the present day had acquired amongst them, in one way or another, a great deal of distinction as regarded art; and although that distinction had been most prominently achieved of late years in the pursuit of Gothic architecture, it was encouraging to him to find that of late some of the most distinguished Gothic architects had been led towards Classic art. During the Conference Mr. Burges had stood up to advocate the claims of Greek art, and in his (the Professor's) humble opinion that was "the beginning of the end" of the revived Gothic era, and that before very long we should see Greek architecture revived in this country. ("Hear, hear," and "No, no.") Everything must have its turn; and he felt satisfied that when it came to the turn of the Classicists, they would employ Greek architecture with as much credit to themselves as that which attached to the leaders of the Gothic revival. In conclusion, Professor Kerr reminded those gentlemen present who were members of the Institute that he had always been at their command whenever they wanted him to make a speech or start a discussion on whatever subject. He now asked them to pay him for his past services by allowing him to propose a toast of his own, viz., "The Sons of Sir Charles Barry." There were present three of the sons of that distinguished man. One of them had attained to the honourable distinction of being the President of the Institute; another was the Professor of Architecture at the Royal Academy; another (Canon Barry) was Principal of King's College; while a fourth (and younger) son was fast making his way to distinction. He (the Professor) had always felt, since his boyhood, a particular pleasure in the contemplation of the works of Sir Charles Barry. The peculiar grace which attended every stroke of his pencil was something most remarkable, and had made him pre-eminent amongst modern architects.

The Chairman, after briefly responding, called upon his brother,

Canon Barry, who said that he was only expressing the feelings of himself and his brothers when he said that their father owed very much to the Institute of British Architects, and his family were by no means insensible to the obligation. The kindly manner in which their father's name had been received was very gratifying to them. Sir Charles was much mixed up in public life, and although he held decided opinions on many subjects and expressed those opinions fearlessly, even those who most differed with him were impressed by his sincerity and by his devotion to the noble profession with which his name was identified.

Professor E. M. Barry, R.A., also responded. He thoroughly endorsed all that his brother had said, and remarked that his father was one of the earliest members of the Institute, and one of its most constant supporters. Nothing would have given Sir Charles so much pleasure, had he lived, as to see his eldest son occupying the honourable position of President of the Institute. Great as might be the deficiences of his sons in endeavouring to sustain his fame, they all felt the responsibility under which they laboured, and did their best to be worthy of his name and reputation.

The Chairman in proposing "The Health of the Lord Mayor of the City of London," remarked that municipal institutions, particularly in North Italy and in the Low Countries, had done much for architecture in the past; and in the present day the municipalities of London and the large provincial towns were by no means defaulters in this respect. The City of London had much to show in the shape of architecture, and the great improvements which had been effected by the formation of new streets and the erection of many important buildings had been greatly promoted and encouraged by the Lord Mayor and the Corporation. The present Chief Magistrate of the City of London had special claims on the consideration of the company, for he had a high appreciation of the value and importance of art, as was evinced by the banquet which he lately gave at the Mansion House to the members of the Royal Academy and other art societies, and at which he (the chairman) had the honour of being present as the representative of the Institute. On that occasion Lord Mayor Cotton made a speech which showed how thorough was his appreciation of the value of art museums, picture galleries, and good architecture as factors in the education of the people.

The Right Hon. the Lord Mayor, in responding, claimed that the City of London, from time immemorial, had always been a warm patron of the arts. With regard to architecture alone, he would only instance the great and honoured name of Sir Christopher Wren, who, to a great extent at the instance or with the aid of the Corporation of London, rebuilt a number of churches within the walls of the City, after the Great Fire of London, in addition to that finest and noblest of buildings, the Cathedral of St. Paul's, which, surmounted by its splendid dome, and surrounded on every side by the numerous churches built by the same architect, afforded a *coup d'œil* unparalleled in the world. More recently the Corporation had continued to maintain its position as a warm friend and patron of architecture, as evinced by the carrying out of such works as the Holborn Viaduct, which every foreigner came to see, and which was looked upon as one of the wonders of the world (laughter). The new City Library and Museum at Guildhall, built from the designs of Mr. Horace Jones, the City Architect, was also an earnest of the interest taken by the City of London in art and architecture.

The Chairman next proposed "The Houses of Parliament," coupled with the name of Mr. Beresford Hope, M.P., a gentleman who had had the honour of filling the chair of the Institute, and who was ever ready to champion the interests of art and architecture in the House of Commons.

Mr. Beresford Hope, M.P., in acknowledgment, created much amusement by an ideal description of the House of Commons as it might be regarded two thousand years hence in some manual of history for the use of School Board schools, and concluded by saying that often and often when he had tried to raise a discussion on art questions in the House his greatest success had been in the direction of purifying the atmosphere by diminishing, for the time being, the number of pairs of lungs breathing the air of the House.

The Chairman, in proposing the toast of the evening, "The Royal Institute of British Architects," said that as the company had so recently listened to Mr. Eastlake's interesting sketch of the history of the Institute, it was unnecessary for him to say much as to the past. The Institute had been formed not so much for the promotion of the study of architecture, as with the view of giving to the profession a moral status which it did not previously possess. Prior to the advent of the Institute some architects were in the habit of receiving money payments from builders as well as from clients, but inasmuch as no man could serve two masters, the evil effects of such a state of things were strongly felt. It was a condition of membership in the Institute that no member was allowed to receive money payments from builders in respect of works in progress or completed. This condition was rigidly observed and any infraction of it was followed by the expulsion of the member so offending. As a result, the moral effect was such that even amongst architects who were not members of the Institute the same excellent rule was adhered to, and was very rarely infringed. The Institute was also valuable as a common meeting-ground for the interchange of thoughts and ideas, and for the dissemination of experience gained in practice by the members, who, although in one sense rivals, were animated by a common desire to promote the welfare of their art. With the toast he coupled the name of Sir Gilbert Scott, R.A., who briefly responded.

Mr. Beresford Hope proposed "Success to the Conference," to which Mr. J. Douglass Mathews, one of the hon. secretaries of the Conference Committee, briefly responded.

The remaining toasts were "The Visitors" (proposed by Mr. Whichcord and responded to by Professor Poynter, A.R.A.) and "The Secretaries of the Institute" (proposed by Mr. Octavius Hansard, and spoken to by Messrs. Cockerell and Eastlake).

## THE IMPORTANCE OF GREEK ART AND LITERATURE TO THE PRACTICE OF GOTHIC ARCHITECTURE.

BY MR. WILLIAM BURGES.

My present observations will, I am afraid, be considered very brief and very exclusive. They will be short because in a conference the great object is to compare experiences and to obtain as many opinions as possible: this evidently cannot be done unless the papers are very short. On the other head, of exclusiveness, I must remark that the very title of my paper indicates that it is addressed to one particular class of my architectural brethren.

In the first place, let me say a few words as to the present state of architectural art. If we take up any of the architectural publications, of which there are no less than four weekly ones, we are simply astonished at the number of various styles which are all being practised concurrently. There probably never was such a complete architectural masquerade as we see at the present time. The history of this state of things is not a little curious, and shows how important a part literature has played in this development.

Although Greek architecture was known and described a hundred years ago, it was little practised until Lord Byron published his poems and made us all Philhellenists. Then came Sir Walter Scott with his quasi-mediæval romances, who caused the Gothic revival to set in: the last phase—the Queen Anne style (as it is called)—being due to the works of Thackeray.

It was quickly found that the Greek style was unsuited to our habits, and still more to our climate; but these considerations did not apply to the Gothic revival, which consequently made a deeper impression, and lasted, and I hope will continue to last, very much longer. Some very few years back we were threatened with a Classic revival,—a revival freely predicted by the gentlemen who do us the honour of more or less instructing us in the columns of the architectural press. The so-called Classic revival has resulted, however, in the Queen Anne style, than which nothing can be less Classical, while its practitioners are simply deserters from the Gothic school. The real reason for the adoption of this style are —1. That it is easier to design; 2. That it takes fewer drawings; 3. It is very cheap; being, in fact, little else than the ordinary house with high-pitched roofs, white clumsy sashes and bars, with sundry rubbed brick scrolls over the doorways and other parts it may be wished to ornament.

Now these are certainly great advantages, but how about the art? As Mr. Ruskin would say, does the architect love his brick-scroll when he has done it? In future times, when it is a question of a new street, will any one of the buildings in question be spared by the Board of Works because it is beautiful? I think not. We must always take into consideration not only what we ourselves think of a building, but what posterity will think of it, and this brings me to the subject of this paper, viz., that if these deserters from the Gothic school had studied Greek art and Greek literature, as they ought to have done, they would not have drifted into their present very questionable style. It is true we may all, more or less, have to build cheap edifices; but then we can generally make them picturesque in their outline. This, indeed, the school in question has done; but cheapness does not of necessity involve bad art, and there can surely be no necessity to perpetrate the broken-backed scrolls and false little pediments. Just for a moment imagine an ancient Greek brought to life again and shown these buildings. What would he think of the unnecessarily ugly details?

It is as a cure for this state of things that I would most earnestly recommend a careful study of Greek art and Greek literature to my Gothic brethren. It is really the key to the position; but in studying Greek art it will not be sufficient to consult Stuart's "Athens" and other like books. The actual buildings must themselves be visited. A journey to Athens and back can be accomplished within three weeks, or at most a month, leaving a week for the Acropolis itself. It was not until I was actually on the spot that I understood how beautiful Greek architecture was, and how nearly it was allied in spirit to that of the thirteenth century. From that time I took a new view of the latter art, and things which had before appeared arbitrary and confused became clear and logical. I saw the same mind working at Athens as at Chartres, but in a different climate, under different conditions, and with different material.

I had been told that Greek architecture was beautiful; but I could not believe it, for I had only seen it represented in books, where the white columns were shaded until they looked like those thickly coated with soot on the outside of St. Paul's. It was impossible to believe that these things could be beautiful; but on the spot itself they were very different, and I saw that, dry bones as they were, the climate, which afforded the broad lights on their surfaces, and furnished the glorious blue sky which formed the background, made every difference. I also saw that each building was placed with the most consummate art, and turned exactly in the direction where it would be seen to the very best advantage from certain points of approach.

Further investigation showed traces of the colour, which, by artfully-designed ornaments, principally in bright tints and thin lines, softened down the intolerable glare of the white marble when first the edifice was built. It is a curious fact that colour thus applied upon a bright surface at a distance not only, as might be expected, loses its individuality, but also gives a light tint of its prevailing colour to the marble. Of course there were other parts coloured in greater masses, such as the triglyphs, which would be seen as local colour even at a distance.

The next information was obtained from Mr. Penrose's book. From this I learnt how by almost invisible corrections of the lines of the architecture the same softness was given to a hard marble building as we see in a sketch. Everybody knows how a design always looks better in a sketch than it does in a careful drawing (I am referring to geometrical drawings), and how very often the building itself looks even harder than the geometrical drawing, especially if the latter is touched up with stone joints, real or imaginary. The Greeks were perfectly aware of this fact, and provided for it accordingly. I hardly know a more instructive book than Mr. Penrose's, not for the purpose of copying, for the same curves would in all probability not work in again unless under precisely similar circumstances, but for the purpose of gaining a general view of the whole arrangement, and for showing how the Greeks proceeded in this matter under certain circumstances. I also venture to doubt whether the results were really obtained by the geometrical means shown by Mr. Penrose, or whether they were not due to some simple mechanical instrument, such as a bent lath in the case of the lines, or to free-hand drawing in that of the mouldings.

And here I may observe that there are few

things so difficult as the designing of mouldings. It is true that books have been published giving sections of mouldings which have at various times been used in all styles of architecture, but these will not enable the architect to design effective results. The section of a moulding is only the means to an end in the actual work. You do not see the action of the moulding; you see the front view, and whether that section will make an effective front view depends upon the position in which the moulding is to be placed, the amount of light, and the colour of the material. In Greek work, I suspect, the nature of the coloured ornament with which the moulding was enriched had something to do with the shape.

If we look at the Greek statuary we see precisely similar arrangements for making it effective and relieving it with colour; thus a seated figure seen from below would have an inclined lap and short thighs, in order to counteract the foreshortening in the perspective. The same thing occurs in the figures at Wells Cathedral, but Mr. Falkener, in his "Dædalus," declines to believe that the Mediæval artists were influenced in so doing by the same motives as the ancients. This deduction is evidently most unjust and erroneous, for it supposes that the men who worked at such places as Wells, Chartres, and Rheims, had neither eyes to see nor brains to draw deductions. The Greek sculptor, equally with the Mediæval master of living stones (as they were called), knew perfectly well from experience that monumental sculpture, *i. e.*, that destined for buildings, demands a very different treatment from that destined to be seen closely, and acted accordingly.

It may be asked how the student of Mediæval art can apply the lessons he receives at Athens. I reply that climate, material, and construction being totally different between Greece and England, he especially derives the very great advantage of not being able to copy; he must have recourse to that most laborious of occupations, that of using his head; in fact, he will be all the better if he does not make a single sketch. He may, indeed, enter notes in a note-book, but even that he may safely throw away when he has filled it up.

The questions he must ask himself are,—Why did the Greeks do this? Why did they cut away that stone or add this? Why was this building set at an angle? And when he has resolved such questions at Athens he will find himself very much more competent to resolve similar, but not exactly the same, difficulties when he works on the Classic style of the thirteenth century. It is true in the latter case that the mouldings are deeper; but he will learn to give them a proper quantity of light and shade, and not overdo them in this respect, as was the case in the Early English style in our own country. It is true that our climate prohibits, to a great extent, external polychromy, more especially that more delicate description which is only suitable for pure delicate substances, such as marble, ivory, and alabaster; but he can use colour in the more protected parts of his work, such as the tympana of the portals; and in the interior statuary, such as the font, pulpits, and domes, he can find employment for alabaster and marble, and consequently for the more delicate polychromy. Indeed, I do not quite see but that even the external system of polychromy might be used internally with regard to a room lined with white marble, or still better, with the more delicate-tinted alabaster.

To go into the question of the subsidiary arts, such as engraving, mosaics, enamelling, bronze-work, and, indeed, all those little arts which clothe the dry bones of architecture, and render it agreeable, would take too long a time; suffice it to say that the true architect should be able to design and superintend them. To suppose him to execute them would be asking too much. No human life would be long enough to acquire a moderate proficiency. The great duty of the architect is to design his architecture, and to see to its proper execution, as well as to that of the lesser arts.

In acquiring the knowledge necessary for him to do this, nowhere will he find greater help and instruction than in the careful study of Greek art. The vases, the mirror cases, the gems, the jewelry, — all have their instruction to give, more especially in the human figure; for the ancients had advantages in this respect which were denied to the artists of the Middle Ages. The Greek saw the nude human figure every day, and all day long; he also saw it developed in its perfection, for his fellow citizens did not contort their bodies with tight, ill-fitting garments and ugly shoes; on the contrary, they took the greatest care of it by means of bathing and athletic exercises. The Greek artist saw the human body in its natural attitudes, free from all restraint; he went away and remembered it,—a far better way of studying than that from a fixed attitude by an awkward, unintelligent model at 1s. 6d. per hour. The nearest approach to the old state of things is practised, I believe, in the monastic schools of Mount Athos, where, after the pupil has made his study from the model, the said model is removed, and the pupil is obliged to make another study from memory.

The Mediæval artist was to a great degree deprived of the study of the human figure in its nude state. In this case we moderns have clearly an advantage. We have not the chance that the Greek had of observing it all day long, but we can have models, and it depends on ourselves if we use them in an intelligent manner.

After all we shall fail to gain all the benefit we may hope to draw from works of the ancients if we neglect their literature. In the Middle Ages it was not neglected: it is true that Greek art was but little read, but educated men were perfectly familiar with that of Rome. The works of Chaucer, Dante, Petrarch, of the author of "Le Roman de la Rose," and many others, all abound in classical illustrations, and how many more advantages have we who have the whole of Greek literature at our disposal. I do not mean to insinuate that the architect is to be expected to read all the Classic authors in their original languages. Few of us have the advantage of a college education. Art is too long and too difficult to allow three or four years to be subtracted from our best and most teachable time. The little Greek learnt at school is soon forgotten: perhaps it was only presented to us under the form of small portions of Xenophon, Homer, and Euripides, our recollections of the tragedies being principally composed of the particles and accents.

On the contrary, our education proper begins when we leave school,—what we have learned there being only a preparation for it. There are excellent translations of all the best authors, and by reading concurrently two or three translations (one probably metrical), we can end by having a very fair idea of the author. I do not mean to infer that the Mediæval authors should be neglected; on the contrary, they should be read concurrently with those of the old world. There is wonderful similarity of feeling, for instance, between Herodotus and Froissart, much as there is between Greek and thirteenth-century architecture. Aristophanes and Rabelais are another instance of working on similar lines. The great use of the study of literature to an architect is not only to educate him, but to give him that judicial power which is called good taste. Literature itself will not do this, but it will help. Among other helps is the seeing of beautiful things, which also includes the surrounding yourself with them, and, above all, the study of the human figure.

These things are the more important as the question of art and taste is becoming more prominent every day; in fact, it is *the* question. If we are ever to have a style in architecture it will certainly not come from the exclusive choice of any of the existing ones, neither will it come in our own time, although certain writers, as early as thirty years ago, were calling out for no copying, but for the creation of a new style. They might as well have asked for the millennium. Nobody ever can, or ever will, invent a style; it must come by common practice and common consent. In the meanwhile we may help it on by becoming better artists, and being better read. No one can predict how the new style will be evolved, or when it will come: perhaps some day we may wake up and the law of leasehold may be abolished; then it may be discovered that it pays to make what is our own,—say our house or our warehouse,—the best of its kind. Then may follow the consideration that dirty brick and decaying stone are not the most suitable materials in a city like London, with its atmosphere saturated with gases; then may follow the reflection that granite, porphyry, and majolica are the only substances which will resist the said gases.

But majolica can be decorated and painted and made to tell histories, and to speak like the living stones of the Mediæval artists, and then, if we have not neglected our opportunities, and if we have studied the arts,—both the great and subsidiary,—in a monumental spirit, then indeed we may see the beginning of a new style,—a style founded upon common sense, and construction in our own materials combined with beautiful and monumental art.

## IMPROVED DWELLINGS IN TOWN.

BY MR. C. FORSTER HAYWARD, F.S.A.

HAVING so recently read notes on this subject at this Institute, I will confine my remarks at present within very strict limits. It seems to me that one of the best chances for artisans' dwellings being improved is to get artisans themselves to combine and erect them for their own accommodation,—of course, with suitable professional assistance and oversight. We should then *see* what we can at present only surmise—what the British workman thinks most suitable for himself—not only what the various benevolent agencies at work think he ought to have. If by co-operation applied to building—particularly artisans' dwellings—a solution could be found of the question (for it is a question still which will crop up continually, notwithstanding triumphantly strong statistics as an answer), whether it will pay to build houses for artisans in London as an ordinary business transaction, some good at least would be done. Also, if it could be decided definitely whether the workman objects to live in flats, and only tolerates this kind of residence because he can get no other near his work, another step would be gained. Again, it would be something to know, by seeing the actual execution of work by a body of British building workmen, what sort of water-fittings for instance, as for sinks, closets, &c., and what kind of workmanship in woodwork and finishing generally was deemed sufficient or desirable in a workman's dwelling. For it seems all very well, but perhaps a little beside the mark, for us to discuss too minutely what is best here and there for men who are or ought to be, as a body, more capable than ourselves of stating what they want, and how much they can pay for it. In other matters workmen or artisans are not slow to tell us what is best for them, or what they think is so. Why not, therefore, trust them, and urge them to show what is wanted for themselves in the way of dwellings of a (1) common, (2) an "improved," and (3) a "model" character? By this I would wish to be understood to refer to three grades of buildings suitable for artisans of all positions, including poor widows and working women generally. It will be seen that I refrain myself from discussing details too minutely, feeling that this has been done already by the kind and thoughtful, and would now desire that the artisan should think and act for himself, and prove his capability of supplying his own needs now that the new Act has removed difficulties as to sites.

I have received, as I suppose we all have recently, a prospectus of a Co-operative Building Society, which aims, amongst other things, at providing artisans' dwellings, and so the matter seems ripe for solution, as among the members of the management committee, are "an engineer's assistant," a "late builder," a "superintendent of works," a "foreman of works," a "clerk of works," besides an accountant, a stock-broker, and another. I fear, however, the object we are discussing is but a small part of the proposal, and is only intended to be undertaken as any other business that may offer, and not as a genuine co-operative work for the provision by the promoters of something wanted specially by themselves and their own class. Of course, I do not suggest action to be taken by such without proper advice, or such assistance as may be wanted to perform for them what they cannot perform for themselves.

Of the three grades of buildings referred to, those of the first, or common, as I have said, can be discussed with the greatest advantage to the parties interested (because it is the most neglected of all), though perhaps with the least pleasure to ourselves. It will compel us to consider how little, not how much, can be put into these buildings, so that they may be decent and good, and yet not too expensive. How strong and sound work can be made, and yet how simple and effective; in fact, be a wholesome study in severity and substantiality. And our artisan builders, too accustomed to flimsy, scamping work, would find a good lesson in erecting a substantial (and cheap, because substantial and good of its kind) poor man's dwelling, so as to pay better *in the end* than ordinary work for a similar purpose.

Again, directing one's attention to this lower class of building will be the right way of heaving

up the whole mass. The raising of the top class can best be done by lifting the lower, if only the lever be strong enough; but to cater for the respectable well-to-do operative only, and to leave the poor widow and her family, and the struggling street seller and his wife alone in their poverty, because they *cannot afford* to pay the rent of the superior accommodation, is, I think, a mistake. I am thus, it will be seen, pleading for the poorer classes; and I have plans to show,—though there is really nothing special in them that we do not all know of,—how far I think we ought at present to go in providing improved accommodation for them. I have lately seen the commonest and poorest courts of Drury-lane clean, decent, and comfortable,—almost an impossibility, one would think. So there is hope on the side of improvement, and encouragement to balance disappointment. One of the greatest helps to the proper conduct of the inhabitants and their appreciation and care of improved homes is the kind and considerate but firm and wise conduct of the agent, especially when both owner and agent of this character are one and the same person.

## AN HISTORICAL SKETCH OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS.*

BY MR. CHARLES L. EASTLAKE, SECRETARY.

IN 1846, at the instance of Lord de Grey, her Majesty was graciously pleased to bestow on this Institute a lasting mark of her favour, by founding the Royal Gold Medal, the annual award of which has since become one of the most interesting events of our official year. It was originally intended as a student's prize, to be offered for the best designs in Grecian, Roman, or Italian architecture, and the Council proposed to supplement it with the sum of 50*l.* on certain conditions of Continental study, such as are at present attached to the Soane medallion. But the fates had ordained another destination for the Royal medal. Although the subject fixed on for the prize was one calculated to fire the enthusiasm of competitors, being no less than a new Institute, the drawings submitted did not reach that standard of merit which the Council deemed necessary to justify the award, and no award was made; but out of this apparent evil a decided advantage resulted. A consultation took place, and, with her Majesty's consent, that which had been founded as a student's prize became the most honourable distinction to which our profession can aspire,—a distinction which is coveted by foreigners as well as by Englishmen,—and which has been conferred, I need not tell you how deservedly, on the eminent and gifted French architect whom we have the pleasure of welcoming this evening.

About this time I am glad to find that the Institute took the first steps towardi the organisation of a benevolent scheme, which, though it has since passed into other management, was first devised by a committee of our own body, and is still supported by a large number,—I wish I could say by *all*,—of our own members. That excellent institution, the Architects' Benevolent Society, the very name of which proclaims its object, and should suffice to enlist our sympathies, is an offspring of which the parent Institute may well be proud. Ably managed and judiciously administered, this charity has for many years past done much good and silent work; and if to mention it be a digression from the immediate subject of my paper, I hope I shall be excused by making it an appeal for your extended, continuous, and liberal support.

While referring to the prolific character of the Institute, I must not forget another bantling which may claim its paternity, and has received its fostering care. I mean the Architectural Publication Society, which, after experiencing many vicissitudes, is now in a fair way of arriving at maturity. "Of making many books," says the preacher, "there is no end." In this case there is only one book, but a big one, in many volumes, and I make no doubt, that when Mr. Wyatt Papworth writes "*Laus Deo*" on the last sheet of copy for the Dictionary of Architecture, he will have completed a work for which posterity, as well as his contemporaries, will be grateful.

The year 1849 was remarkable for the appointment of a committee whose object was precisely similar to the one which reported only last year, viz.:—An inquiry into the affairs of the Institute, with the view of increasing its efficiency. That history repeats itself is a proverbial fact, and it is curious to note that some of the problems which presented themselves for solution a quarter of a century ago, have turned up, like a recurring decimal, in the present day. Some of the schemes for improvement then devised have since been realised; as, for instance, the publication of a synopsis of our proceedings at the close of each session, the appointment of special committees, the holding of an annual *conversazione*, the requisition of original papers from newly-elected members, the adjudication of prizes by the general body of members, and modification of the terms on which associates were elected. But wilder proposals for reform met with no encouragement, and were consigned to that limbo which is guarded by prudence and discretion.

The following year found the Institute, like the rest of the world, big with hope as to the result of the first Great Exhibition of all Nations. With great public spirit the members voted a sum of fifty guineas towards an undertaking, the effect of which, though vastly overrated in regard to some of its aims, has, I suppose, had a permanently beneficial influence on the industrial art of this country.

By this time Mr. J. J. Scoles had succeeded Mr. Poynter as Honorary Secretary, and in conjunction with Mr. C. C. Nelson held that office, while Professor Donaldson still conducted the foreign correspondence. I cannot mention their names or those of Mr. (now Sir Digby) Wyatt, and Mr. T. Hayter Lewis, who shortly afterwards occupied the same position, without reminding my hearers how deeply indebted the Institute is to the zeal and energy with which those gentlemen discharged their duties. They held office during a period which must have been a most critical one for the welfare and advancement of this society, and it is not too much to say, that but for their exertions it might never have been what it has since become.

It was at the Foreign Secretary's suggestion, that in 1851 the Council, with the authority of the general body of members, memorialised her Majesty on the subject of the Royal Tombs in Westminster Abbey, which at that time bade fair to perish from decay and mutilation. In the previous year a committee of members had done public service by their advice respecting the Metropolitan Buildings Bill, then in course of preparation. A little later we find in the annual report an earnest appeal for the necessity of improving the dwellings of the poor, and special mention of Mr. George Godwin's name, which has been so long and honourably associated with that benevolent object. In these and numerous other instances, the Institute has identified itself with matters of national importance, and I trust will long continue to do so.

For some years following the period at which we have now arrived in the history of the Institute, no material changes in its administration took place; nor do we find any events of importance recorded in its annals. The number of members increased gradually, but not in the same rate as in the first *decennium* of its existence, and by no means so rapidly as at the present time. A considerable proportion of the annual reports issued by the council was devoted to comments on the papers read during the previous session. Events of public or professional interest, such as the completion of the Houses of Parliament, the establishment of the Architectural Museum, the International competitions at Amiens, Hamburg, and Lille; the Public Health Bill, and various architectural improvements in London, elicited from time to time an expression of official opinion; but as they are matters lying beyond the immediate scope of this paper, I will not stop to consider them in detail.

The Metropolitan Buildings Act, passed in 1855, marked a notable event in the career of the Institute, by including in its provisions that examination with the conduct of which the Institute has been since officially charged, and which every candidate who desires to become a district surveyor is expected to pass before he can be appointed to that office. This practical recognition by the Government of our corporate body is one which could scarcely be other than gratifying to all who value its national status; and it is due to the memory of Sir William Tite to add that he availed himself of his position in Parliament to accomplish that which he was eminently qualified to recommend.

It was at first thought that this measure would have formed a basis for the adoption of one in which our profession is more immediately interested, viz., the establishment of a diploma; but the question, as you know, remains unsettled at the present time, in spite of endless discussion and arguments, which have almost become stale by repetition. The subject is so intimately allied with another to which I must presently refer,—viz., the architectural examination,—that I shall reserve the few words that I have to say respecting it until I can deal with both together.

The limited extent of my paper prevents me from describing at any length the origin and progress of the Architectural Association,—a society of young and energetic students formed in 1842, and which, as you know, still flourishes under this roof. Suffice it to say that, in 1857, certain proposals were made by which it was supposed the Association might be induced to join the Institute, and in fact become merged in it, on apparently advantageous terms. The offer was then, as it has been since, courteously declined; and though one cannot help regretting that, in a provision like ours, one representative society does not suffice to secure all the requirements of a professional guild (and this, in the interests of architecture, whether regarded as an art or a business, it should undoubtedly do); one can nevertheless understand and appreciate that independent spirit of the Association which has resulted in honest emulation and judicious self-government.

The time had now arrived when the increasing number of its members, and the enlarged scope of its corporate functions, obliged the Institute to think of securing more room and convenient quarters than those in Grosvenor-street. This desideratum led to the formation of the Architectural Union Company, a body of professional men who raised, by the issue of shares, a capital sum, sufficient to secure these premises for the occupation of societies connected with architecture, and with architecture alone. Such at least was the hope entertained at the time; and if I am wrong, I can but refer to the legend which runs across the front of this house. The principal floor was destined for the special use of the Institute, while the spacious galleries which were erected at the rear of the building were intended to accommodate the Architectural Exhibition, the Architectural Photographic Society, and the Institute itself on certain occasions. But, alas, for the vanity of human aspirations! The Architectural Exhibition, after struggling many years for existence, is defunct; and the Photographic Society did not long survive it. The Genius of Painting and the Goddess of Music, both arrayed in a somewhat commercial garb, have by degrees taken possession of the ground floor; while the sister art of Architecture lives in daily fear that, as time goes on, they will be creeping upstairs. To drop the metaphorical strain, let me remind you of the specific purpose for which these premises were acquired, and express my earnest hope that we may, ere long, make some effort so to secure them for our society that it may be housed in a manner worthy of its name.

In 1859, Mr. F. C. Penrose, whose researches in the field of Greek art had secured for him a well-deserved reputation, succeeded Professor Donaldson as hon. secretary for foreign correspondence; while Mr. Digby Wyatt, who had held office as hon. secretary for three years, gave up his portfolio to Mr. Thomas Hayter Lewis, better known of late years as the distinguished Professor of Architecture of University College.

In 1860, the Institute found itself in new quarters and under new generalship. Lord de Grey, whose last public act was to open the proceedings of the session, died full of years and honours, after having held the office of president for a quarter of a century. On the abstract question whether it is or is not desirable that that office should be held by a non-professional member, opinions may be divided; but there can be little doubt that, while the Institute was still young, and required the stimulus of Royal favour and aristocratic patronage, Lord de Grey's social position was of immense service in securing these advantages. With his name our charter will be inseparably associated. To another non-professional president, Mr. Beresford Hope, the Institute is indebted for having been enrolled among the Royal Societies of this country.

Lord de Grey was succeeded by one whose name is among the most loved and honoured in our profession; an architect who, at an early age, received from the world, as a tribute to his talents and accomplishments, an amount of admiration which might have turned the heads of vainer men, but which wrought no change in his naturally modest and unassuming disposition. Gifted by nature in more than one sense,—a cultivated scholar, a refined artist, a courteous and

* See p. 581, *ante*.

things so difficult as the designing of mouldings. It is true that books have been published giving sections of mouldings which have at various times been used in all styles of architecture, but these will not enable the architect to design effective results. The section of a moulding is only the means to an end in the actual work. You do not see the action of the moulding; you see the front view, and whether that section will make an effective front view depends upon the position in which the moulding is to be placed, the amount of light, and the colour of the material. In Greek work, I suspect, the nature of the coloured ornament with which the moulding was enriched had something to do with the shape.

If we look at the Greek statuary we see precisely similar arrangements for making it effective and relieving it with colour; thus a seated figure seen from below would have an inclined lap and short thighs, in order to counteract the foreshortening in the perspective. The same thing occurs in the figures at Wells Cathedral, but Mr. Falkener, in his "Dædalus," declines to believe that the Mediæval artists were influenced in so doing by the same motives as the ancients. This deduction is evidently most unjust and erroneous, for it supposes that the men who worked at such places as Wells, Chartres, and Rheims, had neither eyes to see nor brains to draw deductions. The Greek sculptor, equally with the Mediæval master of living stones (as they were called), knew perfectly well from experience that monumental sculpture, *i. e.*, that destined for buildings, demands a very different treatment from that destined to be seen closely, and acted accordingly.

It may be asked how the student of Mediæval art can apply the lessons he receives at Athens. I reply that climate, material, and construction being totally different between Greece and England, he especially derives the very great advantage of not being able to copy; he must have recourse to that most laborious of occupations, that of using his head; in fact, he will be all the better if he does not make a single sketch. He may, indeed, enter notes in a note-book, but even that he may safely throw away when he has filled it up.

The questions he must ask himself are,—Why did the Greeks do this? Why did they cut away that stone or add this? Why was this building set at an angle? And when he has resolved such questions at Athens he will find himself very much more competent to resolve similar, but not exactly the same, difficulties when he works on the Classic style of the thirteenth century. It is true in the latter case that the mouldings are deeper; but he will learn to give them a proper quantity of light and shade, and not overdo them in this respect, as was the case in the Early English style in our own country. It is true that our climate prohibits, to a great extent, external polychromy, more especially that more delicate description which is only suitable for pure delicate substances, such as marble, ivory, and alabaster; but he can use colour in the more protected parts of his work, such as the tympana of the portals; and in the interior statuary, such as the font, pulpits, and domes, he can find employment for alabaster and marble, and consequently for the more delicate polychromy. Indeed, I do not quite see but that even the external system of polychromy might be used internally with regard to a room lined with white marble, or still better, with the more delicate-tinted alabaster.

To go into the question of the subsidiary arts, such as engraving, mosaics, enamelling, bronze-work, and, indeed, all those little arts which clothe the dry bones of architecture, and render it agreeable, would take too long a time; suffice it to say that the true architect should be able to design and superintend them. To suppose him to execute them would be asking too much. No human life would be long enough to acquire a moderate proficiency. The great duty of the architect is to design his architecture, and to see to its proper execution, as well as to that of the lesser arts.

In acquiring the knowledge necessary for him to do this, nowhere will he find greater help and instruction than in the careful study of Greek art. The vases, the mirror cases, the gems, the jewelry, — all have their instruction to give, more especially in the human figure; for the ancients had advantages in this respect which were denied to the artists of the Middle Ages. The Greek saw the nude human figure every day, and all day long; he also saw it developed in its perfection, for his fellow citizens did not contort their bodies with tight, ill-fitting garments and ugly shoes; on the contrary, they took the greatest care of it by means of bathing and athletic exercises. The Greek artist saw the human body in its natural attitudes, free from all restraint; he went away and remembered it,—a far better way of studying than that from a fixed attitude by an awkward, unintelligent model at 1s. 6d. per hour. The nearest approach to the old state of things is practised, I believe, in the monastic schools of Mount Athos, where, after the pupil has made his study from the model, the said model is removed, and the pupil is obliged to make another study from memory.

The Mediæval artist was to a great degree deprived of the study of the human figure in its nude state. In this case we moderns have clearly an advantage. We have not the chance that the Greek had of observing it all day long, but we can have models, and it depends on ourselves if we use them in an intelligent manner.

After all we shall fail to gain all the benefit we may hope to draw from works of the ancients if we neglect their literature. In the Middle Ages it was not neglected: it is true that Greek art was but little read, but educated men were perfectly familiar with that of Rome. The works of Chaucer, Dante, Petrarch, of the author of "Le Roman de la Rose," and many others, all abound in classical illustrations, and how many more advantages have we who have the whole of Greek literature at our disposal. I do not mean to insinuate that the architect is to be expected to read all the Classic authors in their original languages. Few of us have the advantage of a college education. Art is too long and too difficult to allow three or four years to be subtracted from our best and most teachable time. The little Greek learnt at school is soon forgotten: perhaps it was only presented to us under the form of small portions of Xenophon, Homer, and Euripides, our recollections of the tragedies being principally composed of the particles and accents.

On the contrary, our education proper begins when we leave school,—what we have learned there being only a preparation for it. There are excellent translations of all the best authors, and by reading concurrently two or three translations (one probably metrical), we can end by having a very fair idea of the author. I do not mean to infer that the Mediæval authors should be neglected; on the contrary, they should be read concurrently with those of the old world. There is wonderful similarity of feeling, for instance, between Herodotus and Froissart, much as there is between Greek and thirteenth-century architecture. Aristophanes and Rabelais are another instance of working on similar lines. The great use of the study of literature to an architect is not only to educate him, but to give him that judicial power which is called good taste. Literature itself will not do this, but it will help. Among other helps is the seeing of beautiful things, which also includes the surrounding yourself with them, and, above all, the study of the human figure.

These things are the more important as the question of art and taste is becoming more prominent every day; in fact, it is *the* question. If we are ever to have a style in architecture it will certainly not come from the exclusive choice of any of the existing ones, neither will it come in our own time, although certain writers, as early as thirty years ago, were calling out for no copying, but for the creation of a new style. They might as well have asked for the millennium. Nobody ever can, or ever will, invent a style; it must come by common practice and common consent. In the meanwhile we may help it on by becoming better artists, and being better read. No one can predict how the new style will be evolved, or when it will come: perhaps some day we may wake up and the law of leasehold may be abolished; then it may be discovered that it pays to make what is our own,—say our house or our warehouse,—the best of its kind. Then may follow the consideration that dirty brick and decaying stone are not the most suitable materials in a city like London, with its atmosphere saturated with gases; then may follow the reflection that granite, porphyry, and majolica are the only substances which will resist the said gases.

But majolica can be decorated and painted and made to tell histories, and to speak like the living stones of the Mediæval artists, and then, if we have not neglected our opportunities, and if we have studied the arts,—both the great and subsidiary,—in a monumental spirit, then indeed we may see the beginning of a new style,—a style founded upon common sense, and construction in our own materials combined with beautiful and monumental art.

## IMPROVED DWELLINGS IN TOWN.

BY MR. C. FORSTER HAYWARD, F.S.A.

HAVING so recently read notes on this subject at this Institute, I will confine my remarks at present within very strict limits. It seems to me that one of the best chances for artisans' dwellings being improved is to get artisans themselves to combine and erect them for their own accommodation,—of course, with suitable professional assistance and oversight. We should then *see* what we can at present only surmise—what the British workman thinks most suitable for himself—not only what the various benevolent agencies at work think he ought to have. If by co-operation applied to building—particularly artisans' dwellings—a solution could be found of the question (for it is a question still which will crop up continually, notwithstanding triumphantly strong statistics as an answer), whether it will pay to build houses for artisans in London as an ordinary business transaction, some good at least would be done. Also, if it could be decided definitely whether the workman objects to live in flats, and only tolerates this kind of residence because he can get no other near his work, another step would be gained. Again, it would be something to know, by seeing the actual execution of work by a body of British building workmen, what sort of water-fittings for instance, as for sinks, closets, &c., and what kind of workmanship in woodwork and finishing generally was deemed sufficient or desirable in a workman's dwelling. For it seems all very well, but perhaps a little beside the mark, for us to discuss too minutely what is best here and there for men who are or ought to be, as a body, more capable than ourselves of stating what they want, and how much they can pay for it. In other matters workmen or artisans are not slow to tell us what is best for them, or what they think is so. Why not, therefore, trust them, and urge them to show what is wanted for themselves in the way of dwellings of a (1) common, (2) an "improved," and (3) a "model" character? By this I would wish to be understood to refer to three grades of buildings suitable for artisans of all positions, including poor widows and working women generally. It will be seen that I refrain myself from discussing details too minutely, feeling that this has been done already by the kind and thoughtful, and would now desire that the artisan should think and act for himself, and prove his capability of supplying his own needs now that the new Act has removed difficulties as to sites.

I have received, as I suppose we all have recently, a prospectus of a Co-operative Building Society, which aims, amongst other things, at providing artisans' dwellings, and so the matter seems ripe for solution, as among the members of the management committee, are "an engineer's assistant," a "late builder," a "superintendent of works," a "foreman of works," a "clerk of works," besides an accountant, a stock-broker, and another. I fear, however, the object we are discussing is but a small part of the proposal, and is only intended to be undertaken as any other business that may offer, and not as a genuine co-operative work for the provision by the promoters of something wanted specially by themselves and their own class. Of course, I do not suggest action to be taken by such without proper advice, or such assistance as may be wanted to perform for them what they cannot perform for themselves.

Of the three grades of buildings referred to, those of the first, or common, as I have said, can be discussed with the greatest advantage to the parties interested (because it is the most neglected of all), though perhaps with the least pleasure to ourselves. It will compel us to consider how little, not how much, can be put into these buildings, so that they may be decent and good, and yet not too expensive. How strong and sound work can be made, and yet how simple and effective; in fact, be a wholesome study in severity and substantiality. And our artisan builders, too accustomed to flimsy, scamping work, would find a good lesson in erecting a substantial (and cheap, because substantial and good of its kind) poor man's dwelling, so as to pay better *in the end* than ordinary work for a similar purpose.

Again, directing one's attention to this lower class of building will be the right way of heaving

up the whole mass. The raising of the top class can best be done by lifting the lower, if only the lever be strong enough; but to cater for the respectable well-to-do operative only, and to leave the poor widow and her family, and the struggling street seller and his wife alone in their poverty, because they *cannot afford* to pay the rent of the superior accommodation, is, I think, a mistake. I am thus, it will be seen, pleading for the poorer classes; and I have plans to show,—though there is really nothing special in them that we do not all know of,—how far I think we ought at present to go in providing improved accommodation for them. I have lately seen the commonest and poorest courts of Drury-lane clean, decent, and comfortable,—almost an impossibility, one would think. So there is hope on the side of improvement, and encouragement to balance disappointment. One of the greatest helps to the proper conduct of the inhabitants and their appreciation and care of improved homes is the kind and considerate but firm and wise conduct of the agent, especially when both owner and agent of this character are one and the same person.

## AN HISTORICAL SKETCH OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS.*

BY MR. CHARLES L. EASTLAKE, SECRETARY.

IN 1846, at the instance of Lord de Grey, her Majesty was graciously pleased to bestow on this Institute a lasting mark of her favour, by founding the Royal Gold Medal, the annual award of which has since become one of the most interesting events of our official year. It was originally intended as a student's prize, to be offered for the best designs in Grecian, Roman, or Italian architecture, and the Council proposed to supplement it with the sum of 50*l.* on certain conditions of Continental study, such as are at present attached to the Soane medallion. But the fates had ordained another destination for the Royal medal. Although the subject fixed on for the prize was one calculated to fire the enthusiasm of competitors, being no less than a new Institute, the drawings submitted did not reach that standard of merit which the Council deemed necessary to justify the award, and no award was made; but out of this apparent evil a decided advantage resulted. A consultation took place, and, with her Majesty's consent, that which had been founded as a student's prize became the most honourable distinction to which our profession can aspire,—a distinction which is coveted by foreigners as well as by Englishmen,—and which has been conferred, I need not tell you how deservedly, on the eminent and gifted French architect whom we have the pleasure of welcoming this evening.

About this time I am glad to find that the Institute took the first steps towardi the organisation of a benevolent scheme, which, though it has since passed into other management, was first devised by a committee of our own body, and is still supported by a large number,—I wish I could say by *all*,—of our own members. That excellent institution, the Architects' Benevolent Society, the very name of which proclaims its object, and should suffice to enlist our sympathies, is an offspring of which the parent Institute may well be proud. Ably managed and judiciously administered, this charity has for many years past done much good and silent work; and if to mention it be a digression from the immediate subject of my paper, I hope I shall be excused by making it an appeal for your extended, continuous, and liberal support.

While referring to the prolific character of the Institute, I must not forget another bantling which may claim its paternity, and has received its fostering care. I mean the Architectural Publication Society, which, after experiencing many vicissitudes, is now in a fair way of arriving at maturity. "Of making many books," says the preacher, "there is no end." In this case there is only one book, but a big one, in many volumes, and I make no doubt, that when Mr. Wyatt Papworth writes "*Laus Deo*" on the last sheet of copy for the Dictionary of Architecture, he will have completed a work for which posterity, as well as his contemporaries, will be grateful.

The year 1849 was remarkable for the appointment of a committee whose object was precisely similar to the one which reported only last year, viz.:—An inquiry into the affairs of the Institute, with the view of increasing its efficiency. That history repeats itself is a proverbial fact, and it is curious to note that some of the problems which presented themselves for solution a quarter of a century ago, have turned up, like a recurring decimal, in the present day. Some of the schemes for improvement then devised have since been realised; as, for instance, the publication of a synopsis of our proceedings at the close of each session, the appointment of special committees, the holding of an annual *conversazione*, the requisition of original papers from newly-elected members, the adjudication of prizes by the general body of members, and modification of the terms on which associates were elected. But wilder proposals for reform met with no encouragement, and were consigned to that limbo which is guarded by prudence and discretion.

The following year found the Institute, like the rest of the world, big with hope as to the result of the first Great Exhibition of all Nations. With great public spirit the members voted a sum of fifty guineas towards an undertaking, the effect of which, though vastly overrated in regard to some of its aims, has, I suppose, had a permanently beneficial influence on the industrial art of this country.

By this time Mr. J. J. Scoles had succeeded Mr. Poynter as Honorary Secretary, and in conjunction with Mr. C. C. Nelson held that office, while Professor Donaldson still conducted the foreign correspondence. I cannot mention their names or those of Mr. (now Sir Digby) Wyatt, and Mr. T. Hayter Lewis, who shortly afterwards occupied the same position, without reminding my hearers how deeply indebted the Institute is to the zeal and energy with which those gentlemen discharged their duties. They held office during a period which must have been a most critical one for the welfare and advancement of this society, and it is not too much to say, that but for their exertions it might never have been what it has since become.

It was at the Foreign Secretary's suggestion, that in 1851 the Council, with the authority of the general body of members, memorialised her Majesty on the subject of the Royal Tombs in Westminster Abbey, which at that time bade fair to perish from decay and mutilation. In the previous year a committee of members had done public service by their advice respecting the Metropolitan Buildings Bill, then in course of preparation. A little later we find in the annual report an earnest appeal for the necessity of improving the dwellings of the poor, and special mention of Mr. George Godwin's name, which has been so long and honourably associated with that benevolent object. In these and numerous other instances, the Institute has identified itself with matters of national importance, and I trust will long continue to do so.

For some years following the period at which we have now arrived in the history of the Institute, no material changes in its administration took place; nor do we find any events of importance recorded in its annals. The number of members increased gradually, but not in the same rate as in the first *decennium* of its existence, and by no means so rapidly as at the present time. A considerable proportion of the annual reports issued by the council was devoted to comments on the papers read during the previous session. Events of public or professional interest, such as the completion of the Houses of Parliament, the establishment of the Architectural Museum, the International competitions at Amiens, Hamburg, and Lille; the Public Health Bill, and various architectural improvements in London, elicited from time to time an expression of official opinion; but as they are matters lying beyond the immediate scope of this paper, I will not stop to consider them in detail.

The Metropolitan Buildings Act, passed in 1855, marked a notable event in the career of the Institute, by including in its provisions that examination with the conduct of which the Institute has been since officially charged, and which every candidate who desires to become a district surveyor is expected to pass before he can be appointed to that office. This practical recognition by the Government of our corporate body is one which could scarcely be other than gratifying to all who value its national status; and it is due to the memory of Sir William Tite to add that he availed himself of his position in Parliament to accomplish that which he was eminently qualified to recommend.

It was at first thought that this measure would have formed a basis for the adoption of one in which our profession is more immediately interested, viz., the establishment of a diploma; but the question, as you know, remains unsettled at the present time, in spite of endless discussion and arguments, which have almost become stale by repetition. The subject is so intimately allied with another to which I must presently refer,—viz., the architectural examination,—that I shall reserve the few words that I have to say respecting it until I can deal with both together.

The limited extent of my paper prevents me from describing at any length the origin and progress of the Architectural Association,—a society of young and energetic students formed in 1842, and which, as you know, still flourishes under this roof. Suffice it to say that, in 1857, certain proposals were made by which it was supposed the Association might be induced to join the Institute, and in fact become merged in it, on apparently advantageous terms. The offer was then, as it has been since, courteously declined; and though one cannot help regretting that, in a provision like ours, one representative society does not suffice to secure all the requirements of a professional guild (and this, in the interests of architecture, whether regarded as an art or a business, it should undoubtedly do); one can nevertheless understand and appreciate that independent spirit of the Association which has resulted in honest emulation and judicious self-government.

The time had now arrived when the increasing number of its members, and the enlarged scope of its corporate functions, obliged the Institute to think of securing more room and convenient quarters than those in Grosvenor-street. This desideratum led to the formation of the Architectural Union Company, a body of professional men who raised, by the issue of shares, a capital sum, sufficient to secure these premises for the occupation of societies connected with architecture, and with architecture alone. Such at least was the hope entertained at the time; and if I am wrong, I can but refer to the legend which runs across the front of this house. The principal floor was destined for the special use of the Institute, while the spacious galleries which were erected at the rear of the building were intended to accommodate the Architectural Exhibition, the Architectural Photographic Society, and the Institute itself on certain occasions. But, alas, for the vanity of human aspirations! The Architectural Exhibition, after struggling many years for existence, is defunct; and the Photographic Society did not long survive it. The Genius of Painting and the Goddess of Music, both arrayed in a somewhat commercial garb, have by degrees taken possession of the ground floor; while the sister art of Architecture lives in daily fear that, as time goes on, they will be creeping upstairs. To drop the metaphorical strain, let me remind you of the specific purpose for which these premises were acquired, and express my earnest hope that we may, ere long, make some effort so to secure them for our society that it may be housed in a manner worthy of its name.

In 1859, Mr. F. C. Penrose, whose researches in the field of Greek art had secured for him a well-deserved reputation, succeeded Professor Donaldson as hon. secretary for foreign correspondence; while Mr. Digby Wyatt, who had held office as hon. secretary for three years, gave up his portfolio to Mr. Thomas Hayter Lewis, better known of late years as the distinguished Professor of Architecture of University College.

In 1860, the Institute found itself in new quarters and under new generalship. Lord de Grey, whose last public act was to open the proceedings of the session, died full of years and honours, after having held the office of president for a quarter of a century. On the abstract question whether it is or is not desirable that that office should be held by a non-professional member, opinions may be divided; but there can be little doubt that, while the Institute was still young, and required the stimulus of Royal favour and aristocratic patronage, Lord de Grey's social position was of immense service in securing these advantages. With his name our charter will be inseparably associated. To another non-professional president, Mr. Beresford Hope, the Institute is indebted for having been enrolled among the Royal Societies of this country.

Lord de Grey was succeeded by one whose name is among the most loved and honoured in our profession; an architect who, at an early age, received from the world, as a tribute to his talents and accomplishments, an amount of admiration which might have turned the heads of vainer men, but which wrought no change in his naturally modest and unassuming disposition. Gifted by nature in more than one sense,—a cultivated scholar, a refined artist, a courteous and

* See p. 581, *ante*.

kindly-hearted gentleman,—I can scarcely fancy in our profession a career more worthy of respect and imitation than that of Charles Robert Cockerell.

The removal of the Institute to its present quarters was followed by a large accession of members, and seems to have stimulated the council of that day to the consideration of novel measures. The subject of a professional examination had long been discussed in connexion with the diploma question, and in 1861 it was brought before a special general meeting, at which considerable difference of opinion was expressed. Eventually the matter was referred to a committee, who in due course presented their report. Of this committee the late Mr. Arthur Ashpitel was chairman, and the late Mr. J. W. Papworth hon. secretary; and if the architectural examination scheme may be considered one of the good works of this Institute, to Mr. Ashpitel and Mr. Papworth must be accorded the chief praise for having accomplished its organisation.

In dealing with this important question two preliminary questions had to be settled. The first was, whether the examination should be voluntary; and the second was, whether passed candidates should be entitled to a diploma. The former was one which soon settled itself. In the absence of any legal obligation to qualify, a compulsory examination, even for members of this Institute, would have been out of the question, and the logical deduction was, that a diploma which conferred on those who possessed it no more right to practise than those who did not, was of no value. For a long time even the issue of a certificate was steadily opposed, and of late years, since that point was ceded, the mortifying discovery has been made that we have won a hollow victory. The principle on which a certificate should be granted is admitted on all sides; but meanwhile the examination languishes, not for want of certificates, but for want of candidates to claim them. The truth is, that a certificate is not the same thing as a diploma, and the issue of a diploma involves a question on which a great difference of opinion has always prevailed. It is, in short, the question whether architecture should be an open profession or not. The arguments on both sides may be briefly summarised as follows:—The supporters of a diploma said, in effect,—"We are members of a profession which is no less a business than an art. To the duly qualified practitioner it involves an expensive education, a long course of study, including researches in physical science, chemistry, geology, and what not; an acquaintance with mathematics and the theory of construction; an experience of legal issues; a commercial insight into the value of materials and labour; to say nothing of such accomplishments as a linguist and draughtsman may claim. Is it right or is it fair that after we have spent the best part of our lives in attaining these qualifications, we should find ourselves, in the eyes of the public, in no better position than a builder's clerk, who, being a pushing young man, with a little interest and more assurance than his betters, touts for every job that comes in his way, and, with no real pretensions to taste or advantages of education, slips into a practice which many a qualified man can never secure? The remedy for this is an examination and a diploma, without which no one should be allowed to call himself an architect. Establish them, and the public as well as the profession will be benefited."

On the other hand, their opponents replied:—"It is quite true that architecture is a business as well as an art, but it is an art first, and into the exercise of that art the element of natural taste, however cultivated, largely enters. How can the value of that taste be gauged by a standard which must always be fleeting, and therefore empirical? Who can say, even of our accepted authorities, that they are unanimous respecting the choice of a style, or even the varieties of a style? For three examiners who pronounce in favour of a design you will find nine outsiders of equal eminence who call it commonplace. And if a criterion is to be sought among those monuments of antiquity whom all agree in admiring, a new argument must be encountered. The great masters of our art, who flourished in Italy and France, to say nothing of those in this country, graduated in no school of architecture, and who will contend that their works are the worse for it? It is true that you may eliminate the question of taste altogether, and confine your examination to matters of practical science, but whom will this benefit? Not the *bonâ fide* architectural student, who has naturally turned first to the artistic studies of his profession, and who has yet to learn its science and its business from experience, but the builder's foreman or clerk of works, who has worked at the bench, and knows twice as much about construction as any young gentleman who has just completed his articles. Your examination, in short, will become the means of admitting to the ranks of our profession the very men whom you wish to exclude."

Such, gentlemen, were some of the old *pros* and *cons.* of a question on which I will venture to offer no personal opinion, and from which I must now pass to other topics.

The Professional Practice Committee, one of the first and most useful of those appointed by the Institute, had long felt the desirability of establishing a series of rules relating to the practice and remuneration of architects, which, based on custom and confirmed by experience, might serve as an authority for the profession, as well as a guide to the public. It was a measure which required some caution and delicacy in promoting, and one on which it was deemed advisable to consult the opinion of individual members. With this object in view a series of questions was drafted and confidentially circulated among members of the Institute. The result was a mass of valuable information, which, after careful sifting and analysis, afforded material for the General Rules drawn up in 1862, and, after a slight modification, is still recognised, not only by members of the Institute, but by the profession at large. It is to be observed that those rules, although not absolutely binding on any one, represent so fairly the details of professional usage that they are constantly accepted as evidence on that subject in courts of law.

The year 1862 saw another good work accomplished by the Institute. An excellent and thoughtful paper had been read by our late president, then Mr. G. G. Scott, "On the Conservation of Ancient Monuments and Remains," calling attention to the neglected state of many architectural relics in this country, and urging the necessity of adopting some means of rescuing them from decay and wanton injury. Such a duty would, in the minds of optimists, naturally devolve upon the State. But the principle of British Government, as we know, is not paternal, and the fear of interfering with the rights of private property has long presented difficulties in dealing with this question. Under these circumstances it seemed advisable that a standing committee should be appointed by this Institute for the purpose of investigating cases in which a protest might occasionally be made in favour of ancient buildings threatened with destruction. One of the first duties undertaken by this committee was the preparation of a series of suggestions for the guidance of architects and others charged with the custody or restoration of such buildings. The issue of that paper was in itself of service. But the committee has done more than this, and ever since its appointment it has lent a ready ear to every appeal which has reached it on behalf of architectural relics of historic or artistic interest. In some cases, of course, when counter-pleas of public utility can be urged, or financial considerations present themselves, a remonstrance from any quarter must be unavailing, but, speaking generally, whenever the Institute has been justified in interfering it has done so, and I believe not unfrequently with success.

In the late Sir William Tite, who succeeded Professor Cockerell as president, the Institute found a liberal benefactor. His wealth enabled him to contribute largely to many of the objects for which this society was founded, while his position in Parliament gave a certain weight and influence to any measures partaking of a public character which it undertook during his twice-renewed term of office. Among the numerous acts of generosity that are associated with his name may be mentioned a gift of 500*l.* to the library fund, and a legacy of 1,000*l.*, the interest of which, under the terms of his will, is annually devoted to encourage the study of Italian architecture. I cannot refer to the former gift without reminding you of the splendid store of literary and illustrated works on architecture which has been gradually amassed in our library,—a collection, so far as I know, quite unrivalled in this country, and presenting great advantages to the student. To Mr. Wyatt Papworth the Institute is largely indebted for gratuitous services in forming that collection, which, for some years past, has been under the care and efficient supervision of our librarian, Mr. S. W. Kershaw.

It was during Mr. Tite's first term of office that the Institute appointed a committee, of which Mr. Charles Barry (our present president) was secretary, for the purpose of drawing up and forwarding to the First Commissioner of Works a series of valuable suggestions respecting the Thames Embankment. A few years later the Institute took an active part in advising the Government on the subject of a new Metropolitan Building Act. I might mention many other instances in which this society, seldom accredited with anything beyond the advancement of professional interests, has undertaken, at a considerable sacrifice of time and trouble, labours for which the public has reason to be grateful.

In 1860 Mr. C. C. Nelson, having discharged the duties of honorary secretary for twelve consecutive years, retired from office, after receiving a handsome testimonial in recognition of his zealous and active services. In the same year the Institute paid a fitting tribute to the memory of Sir Charles Barry by attending his funeral in Westminster Abbey. His friend and fellow-worker, Welby Pugin, had predeceased him by some ten years; but the cause which Pugin had most at heart,—the revival of Gothic architecture,—was still a watchword with his friends and admirers, who determined to perpetuate his name by founding a studentship, with the nature of which you are all familiar. The power of awarding that studentship is vested in the Institute; and I am glad to add that the result has been most gratifying to all concerned.

In 1862 Professor Donaldson succeeded to the highest office in the Institute, and it was during his presidency that Mr. C. F. Hayward and Mr. J. P. Seddon were elected honorary secretaries,—a position with which their names were long and gratefully associated.

In the following year the first Architectural Examination was held, and eight candidates passed in the proficiency class. Of these, two subsequently passed in the class of distinction. Modest as these numbers are, they have never been reached since, in spite of certificates and other inducements; and this want of response is a question which still remains to be solved.

In 1863 the Council appointed a finance committee, who have since discharged the responsible duty of regulating the expenses of the Institute, and who annually issue an estimate of the receipts and disbursements for the year.

A little later an attempt was made to establish, in connexion with the Institute, a School of Art accessorial to architecture. The scheme, after some delay, was in part realised by the art classes for figure drawing, &c., opened at the Architectural Museum, and in support of which some liberal grants were made by this Institute. But here, again, the demand for this species of art-education was found incommensurate with the supply. The British workman and the young British student of architecture were found on trial to be somewhat indifferent to the opportunities provided for them, and the plan was abandoned.

In 1865 Mr. Beresford Hope, one of the most accomplished of our honorary fellows, was elected president of the Institute, and entered upon the duties of his office with a zeal hardly expected from an amateur, but eminently characteristic of his devotion to our art,—a devotion which may be described as one of the traditions of his family.

On Mr. Hope's retirement from office in 1867, Mr. Tite was re-elected,—this time for three years. To him succeeded in due course, and for a similar term of office, Mr. Thomas H. Wyatt and Sir Gilbert Scott. It would be almost presumptuous, and certainly unnecessary for me to dwell upon the advantages which this Institute has derived from the generalship of two such distinguished presidents. Suffice it to say that during the last six years the Institute has largely extended its functions and sphere of work. A perusal of the notice papers and the annual reports which have been issued within that period will reveal a record of almost uninterrupted activity, and will afford the best answer to that ill-natured and groundless assertion which we find occasionally made that the Institute is doing nothing, simply because it has not been noisy and officious. It would be a mere platitude to observe that the best and most useful work which is done in this world is often quiet silent work, and I think we should all regret if this Institute, for the sake of a little public notoriety, were to rival in this meeting-room the business of a vestry-hall. But if we are to be judged by deeds rather than words, I could give numberless

instances in which the Institute has done good and public service to our profession and the art which it represents. The very proceedings we inaugurate this evening,—the Conference itself,—grew out of a scheme proposed not very long ago by the Architectural Alliance and matured by a committee of the Institute, in which Professor Kerr took an active part, and at the present moment there are under consideration by our Council and past vice-presidents questions involving as important issues as any which have called for your decision.

In 1867, the number of the Council was increased by five, an addition contemplated in our charter, and fully justified by the fact that the Institute has more than trebled its numbers since that charter was granted. The term of office for which the president and Council are nominated has been prolonged to three years, subject, however, to their annual re-election by the general body. The policy of this change will be understood when it is remembered how largely the functions of the executive have increased of late. It is not too much to say that it requires months of experience before a member of Council can really master the details of the work which he has undertaken, and it would be obviously inexpedient that he should retire from office at the very time when his services are becoming most valuable. Few of those who have not served in the Council can have any idea of the number and variety of subjects brought under their notice and requiring their consideration.

About thirty Council meetings are held during the session, and on each occasion, perhaps, a dozen matters of more or less importance are discussed. Some of these are at once referred to committees, of whom no less than fourteen sat last year; the total number of their meetings having been fifty. The committees report to the Council, in whose name all external business is transacted. This business, it must be remembered, is often quite independent of that involved by the general meetings in this room, of which some twenty have been held during the past twelve months. With these statistics before you, you will not perhaps be surprised to hear that the official correspondence in 1875 reached 1600 autograph letters. As for communications in a set form, half lithographed and filled up by hand, printed circulars and notices,—they are issued by thousands. The letters we receive may be generally classed under two heads, those which come before the Council and those which do not. The first are permanently deposited here; the others are classified under some twenty different heads, and preserved for a year or more according to their importance. This subdivision may be considered excessive, but it enables the secretary at a short notice to refer to any letter on any subject under discussion. The minutes of meeting are all indexed on the same principle and for the same object.

The publication of our Transactions, formerly deferred until the close of the session, now takes place, whenever possible, once a fortnight. This would present no difficulty so far as the papers themselves are concerned, but in order to insure accurate reports of the discussion a copy of each speaker's remarks is now sent to him for correction, and they are not always returned in time for issue between one general meeting and the next. Even with this precaution the most careful editing is required to prevent mistakes, and whenever such mistakes occur it is generally because the publication has been hurried. At the recommendation of the Sessional Papers Committee, to whom the Institute is now indebted for choice of subject and author, special invitations are sent before each general meeting to members and others likely to be interested in the topic under discussion. I have issued as many as fifty of these invitations for a single paper.

Without wearying you with further details, or referring to those special matters of business which require special attention, I shall perhaps have said enough to show you that duties which include those of a secretary, editor, and accountant, could not possibly be expected from an honorary officer, who, to be of practical service, must attend daily at the Institute, and that for not one, but for six or seven hours a day,—at least at this period of the Institute's career. It was with this conviction that, five years ago, the general body resolved that one of the secretaries should receive a salary, and having said thus much, I shall say no more on a subject respecting which I should be the last to obtrude my personal opinion.

For similar reasons I shall refrain from comment on any of the measures which the late committee on the affairs of the Institute and the present committee of Council and past vice-presidents have had under consideration. It is obvious that, as time goes on, and the conditions of things change, the administration of this and every other society will present opportunities for improvement which commend themselves with special importance to individual minds. It is on such occasions that the collective wisdom of an executive body is of service. They alone can estimate the worth of this or that suggestion for reform. They alone know the difficulties which have deferred its realisation.

Finally, in thanking you for the kind attention to which you have listened to a paper, prolonged I fear, too far for your patience, I will only add my hope that the general Conference which this meeting inaugurates may be attended by practical advantage to our profession and to the several societies by which it is represented.

## THE CLASSIFICATION AND REGISTRATION OF BUILDINGS.

BY MR. HENRY PARSONS.

I WILL, by way of preliminary, explain why I have been induced to consider this matter.

I am, as many gentlemen present are aware, in charge as district surveyor under the Metropolitan Buildings Act of one of the largest and most busy districts in the metropolitan area, and it has fallen to my share, in common with others of the district surveyors, to act on the various committees appointed to consider the several Bills proposed to be introduced into Parliament by the Metropolitan Board of Works.

I have observed with great regret that these Bills appear to contain provisions dealing with such very minute details as to greatly aggravate the difficulties already experienced by the district surveyors under the present Act.

I find that it is impossible now to insist on every "jot and tittle" required by the present Act, and I look with the greatest dread on the serious multiplications of requirements contemplated by the Board, as set forth in the Bill presented by them to Parliament in 1874. An experience of nearly twenty years has taught me the almost impossibility of enforcing the strict requirements of the Act; first, as to notice to the district surveyor; secondly, as to the due execution of such matters as trimmer arches of the proper size, chimney-bars, pargeting, and other details.

One or two letters are written to the builder, and then a formal notice is sent, which is met by a promise to amend; this promise is unfulfilled, and nothing remains but to take out a summons. The magistrate, who is already overburdened with work, hears the case, elicits from the district surveyor that the question in dispute is not material to the stability of the building, but simply "contrary to the Act," and either dismisses the case or makes an order grudgingly.

This order, as a rule, is never complied with, and the district surveyor has to submit to a serious loss of time and annoyance, without any remuneration whatever, and with the unpleasant feeling that he has assisted in making clear how the Act may be evaded.

I have also been greatly struck by the enormous and unnecessary waste of time and labour which is entailed by the present system of collection of fees.

The present arrangement seems carefully planned to enable the dishonest and scamping builder to evade payment altogether, because the fees are not payable under the Act until he is bankrupt, or has disappeared; hence the man who has given the most trouble in the execution of the work is precisely the individual who gets off scot free, and the unfortunate surveyor not only has his labour for nothing, but is out of pocket by any proceedings he may take.

I have also observed, with great regret, that the public appear to be quite unacquainted with the real scope of the Building Act, and the power or functions of the district surveyor, and the purchaser of a house which turns out to be badly built does not blame himself for his want of judgment or his parsimony in not obtaining a proper opinion, but quietly or noisily, as the case may be, anthematises the district surveyor, because he had bought "shoddy," the erection of which he considers the surveyor should have prohibited.

Now, being myself of a strongly conservative cast of mind, I have the greatest objection to interfere with the liberty of the subject or the rights of property, and I am of opinion that the public have no more right to interfere unduly with the freedom of the building trade than they have with the freedom of any other trade. I therefore consider that interference should be limited to restraining persons from building in a manner dangerous or injurious to themselves or others, or from offering for sale what I may term an adulterated or spurious article; but I would confine that restraint to the fabric or carcass of the building, which is really the only part which affects the question of safety, or which could be afterwards covered up, or concealed by cement or otherwise, from the examination of a duly qualified expert.

This being so, I consider that the provisions of the present Act, with some slight modifications, cover the whole ground, so far as constraint is concerned: the only thing which is required is an effectual means of enforcing those provisions, and, at the same time, distinguishing the difference between houses reasonably well built, and those which are the reverse.

I believe that if the stringent rules and regulations in contemplation are to be carried into effect the simple result would be a stoppage of building, and a consequent enormous rising of rentals and rates, and I fail to see the policy of compelling the present generation to pay largely increased rentals merely to leave posterity in possession of houses too well and expensively built to pull down, and yet obsolete in their arrangements and fittings. I would rather that an ordinary dwelling-house should be so constructed as to be fairly exhausted and worn out in a reasonable length of time, and then pulled down, and its place taken by what will doubtless be a vastly improved system of construction.

I say a reasonable length of time, but inasmuch as the length of a lease varies very much according to circumstances, I do not think a hard-and-fast line as to the quality of work can be drawn. Hence I arrive at what I term a classification of dwelling-houses. I think it would be unreasonable to require, for instance, such a quality of building as to preclude the erection of dwelling-houses on a holding, say, of forty years; and yet we know that although such buildings might be erected, and might be serviceable for such a length of term, the builder would not see his money back if the usual conditions on a well-arranged estate, or the stringent provisions of an Act were enforced, and, therefore, the land would remain unbuilt upon, and the free exercise of the rights of property interfered with.

I would therefore permit such houses to be built, but I would take care that their substantial quality should be known.

I would therefore enact that all dwelling-houses should be either extra first class, first class, or second class.

I would define as "first class" houses built, so far as the carcass is concerned, in accordance with a general specification to be scheduled in the Act, such specification to be adapted to meet the reasonable requirements of a ninety years' lease, but not going too minutely into details.

I would define as "extra first-class" houses built in a more substantial manner, either as to thickness of walls, scantlings of timbers, or qualities of materials than the foregoing.

And I would define as "second-class" houses built in a manner inferior in quality to the first class.

I would require that no house should be occupied (under penalties) until a proper certificate should be given of its class.

I would enact that no certificate should be granted until the district surveyor was satisfied that, to the best of his knowledge and belief, all the requirements of the Act had been complied with.

I would enact that, as at present, due notice should be given to the district surveyor, but that if the builder made default in giving notice he should pay a double fee.

I would provide that on giving notice the builder should pay two-thirds of the estimated fee, the balance to be paid on receipt of the certificate.

I would require the builder to set forth in his notice the class in which the proposed building was to be registered, and it should be the duty of the district surveyor to notify from time to time to the builder if in his opinion the building was not up to its class.

The builder should have the right within a a limited time to appeal to "the Court."

The certificate when wanted should be signed by the district surveyor, and countersigned by the registrar of the Court, and bear an *ad valorem*

stamp, the revenue from which would be paid into Court.

The certificate should be an integral part of the title to the property, and a duplicate obtainable if necessary from the Court.

The court should consist of a judge possessing the qualifications of a county-court judge, and administering not only the Building Act but other cognate Acts. He should be styled "Judge of the Municipal Court."

He should be assisted by three assessors: one appointed by the Metropolitan Board of Works (an architect being a Fellow of the Institute of not less than fifteen years' standing); one appointed by the Royal Institute (a Fellow of not less than fifteen years' standing); one appointed by the London Association of Builders.

A registrar and clerk, being a solicitor, should also be appointed.

The assessors should be in the commission of the peace, to enable them to hold sittings under the Building Act, and assist in adjudicating in matters arising under the Act.

The salaries of the judge and assessors should be provided by the Metropolitan Board of Works, who would be recouped by the *ad valorem* stamps; other expenses would be covered by Court fees.

The Court being thus constituted, it appears to me that the working of the Act would be greatly simplified. Instead of the present troublesome and tedious system of applying for summonses, and attending before a police magistrate to enforce compliance with the rules of the Act, a simple withholding of the certificate would checkmate the dishonest builder, whilst the unreasonble demands of a crotchety district surveyor would be set right by the supervision of competent professional men at a very small cost, and without the very serious objections of hanging about a criminal court.

The man who is building fairly well will be spared the mortification of seeing his scamping neighbour realising almost the same price from the ignorant and unwary public for a much inferior article, and yet the necessity to a prudent purchaser of obtaining a competent opinion as to the value of his proposed purchase will not be obviated.

The purchaser who invests his money in a house say twenty years hence will have an unmistakable testimony as to the manner in which it was originally built.

As to the district surveyor, his position will be fortified. He will be able to carry out his duties in a less irksome manner, and although he will have more apparent responsibility put upon him, in my opinion it would be more apparent than real, because even at present the signature of the "returns" to the Metropolitan Board is a certificate that to the best of his knowledge all the requirements of the Act have been complied with in regard to the buildings set forth in the returns, and his signature to a certificate would not imply a greater responsibility, but rather less, because should any irregularity remain unamended he could very readily refuse a certificate, whereas at present the return must be made, and it often happens that from lapse of time or change of builder it is impossible to enforce amendment.

The penalties should be for occupying as well as knowingly permitting the occupation of an uncertificated house.

The following is a general idea of the specifications proposed for the first class. The footings to rest upon good lime or cement concrete to the satisfaction of the district surveyor, the walls to be constructed with sound, well-burnt bricks, laid in good mortar, and provided with a proper damp-course. All timber to be of good quality and well seasoned, and to be of not less scantling than is set forth in the schedule.

I must apologise for having looked at this subject from what I call a metropolitan point of view, but I have done so because I am hardly competent to say whether our system could be carried out even in the large provincial cities. I think it of great necessity that the Act should be administered, as at present, by officers who are not the mere servants or creatures of a corporation or board, but holding the position of statutory officers with duties clearly defined in an Act of Parliament, and not subject to capricious interference. I think it is also desirable that these officers should be professional men in practice, as at present, because that fact brings them more in sympathy with those whose works they have to supervise, and to a considerable extent obviates the tendency to drift into what is called "red tapeism." I think also the principle of payment by fees is the correct one, but the districts should be so proportioned as to bring the annual income up to such an amount as to render it worth the while of men to come forward for the appointments whose experience, attainments, and known character would ensure the confidence and respect of the profession, the building trades, and the public generally.

It has been suggested to me that a venal or dishonest surveyor would certify anything for a consideration; but I put that on one side, as I would make the status of the surveyor and the emoluments of his office of such a character as to quite preclude the possibility of a bribe. I think bribery, corruption, and undue influence are far more likely to occur in the case of men of inferior class in the position of paid servants, at low salaries, and under the thumb of men who are probably engaged, directly or indirectly, in building speculations which are under the supervision, so to speak, of their own officers.

I am induced to touch upon these points because the whole feasibility of my suggestion depends upon the professional and personal character of the officers appointed to carry it out, and I am quite satisfied that the builders of London, to say nothing of the architects, would recoil from the idea of being put under the control of a class of men inferior to their own foremen, a class of men who dub themselves surveyors or engineers, as the case may be, and who come forward to undertake all sorts of functions for the brilliant salaries we see constantly advertised in the papers, and who are rated by the worthy magistrates, aldermen, and other authorities who advertise for them as being on a footing with their menial servants.

In conclusion, sir, permit me to say that my proposition in reference to houses is somewhat similar to the system which prevails in regard to shipping, the only difference being that, whereas an unsound or badly built ship usually affects men's lives, a badly built house only affects their pockets; and my object is not so much to control the quality of a building as to provide a means of more readily and effectively enforcing the salutary provisions of the Act in relation to sufficiency of construction and protection from fire. I have not the slightest desire to see landowners relieved from the necessity of employing their own professional advisers by putting the duty of regulating materials and workmanship on a public officer. I would only give the public officer a similar power to that now possessed by the private surveyor of refusing a certificate if the obligations of the Act were not complied with.

## THE INSTITUTE SOIRÉE.

SIR,—I wish to make an effort (not the first) to induce those who are responsible for the arrangements for the annual *soirée* to do something better than has heretofore been done in regard to one item of the entertainment—the music.

Some of your readers, and a good many readers of other publications, are aware that I have some little claim to an opinion on musical subjects; and I venture to say that if the Council, or whoever manage the matter, knew how completely behind even the general taste and appreciation of the day their entertainment is in this respect, they would see the necessity for an alteration.

We come to Conduit-street to what is in fact an "evening party," given by a society professing sympathetic and enlightened feelings in regard to art. We find the musical part of the entertainment represented by a military band placed in the middle of the room, kept "going" conscientiously the whole evening (so loud, of course, as to render any attempts at conversation painful), while the selection itself contains not a thing that educated persons can care to listen to, the music being more of a type which one might expect to hear at Vauxhall or Cremorne; at least so I should imagine, though I confess this comparison is made at random, as I am not acquainted with those places of classical entertainment. I have a vague recollection of hearing a polka called "Wine and Woman" at the last *soirée*, or some nearly equivalent title (possibly it was only *Weib und gesang*); I am pretty sure I heard the "Crio-Crac Galop"; at all events, the "style and title" of the pieces generally was of the description which these reminiscences sufficiently indicate.

On remonstrating once with the secretary on this matter, the reply was that it was necessary to have something of the kind going on to keep the thing from falling flat. In other words, that instead of using music as a part of the rational entertainment of the evening, it is to be a mere noise kept up as an accompaniment to the proceedings. That may be all very well for the opening of a skating-rink, but for an evening entertainment given by the representatives of an educated and artistic profession there is something more paltry and deplorable in the idea than I can well express. I venture to think that no similar society of French or German architects would illustrate a similar entertainment in such a fashion.

That it is perfectly possible to do better I have had evidence from attending the *conversazioni* of another Society which is connected with art, and holds its meetings sometimes in the Conduit-street rooms. At the entertainments of this Society (which has nothing like either the wealth or, in some senses, the *prestige* of the Institute) the arrangement is that at a certain part of the evening a selection of vocal and instrumental music is gone through, and listened to, and that with attention and pleasure: indeed, it seems to be considered the most enjoyable part of the evening's programme. The performers are sometimes professional, sometimes amateur, or a combination of both; the music is not in a very severe or "classical" style (nor should it be on such an occasion, when the audience is not a professedly musical one), nor is the performance such as one would hear in a first-class concert-room; but it is such, both in selection and execution, as educated people may listen to with pleasure; such, in fact, as you would be likely to hear in the drawing-rooms of people with a cultivated appreciation of music. And I wish to ask, why cannot we have something of that kind at the Institute *soirée*, instead of having the accompaniment of music offered to us in a form which at once vulgarises the whole thing, and is almost enough in itself to drive away any musically-cultivated visitors?

I really hope that the authorities at Conduit-street will give consideration to this suggestion, which is not made in a carping or fault-finding spirit, but from a real wish to see the "style" of the Institute *soirée* improved in a point in which there is certainly room for improvement, and which has been, to myself at least, a periodical vexation and annoyance every time the occasion has come round. H. H. STATHAM.

## CASE UNDER THE METROPOLITAN BUILDING ACT.

AT Hammersmith William Shopland, a butcher, of Seagrove-road, Lillie Bridge, was summoned by Mr. Moseley, district surveyor of Fulham, for infringing the terms of the Building Act by building a party-wall for a stable at the back of his house with "half-brick," instead of one brick in thickness.

Mr. Moseley submitted that the wall came within the warehouse class.

Mr. Ingham looked at the Act, which applied to "every warehouse or other building used either wholly or in part for the purposes of trade or manufacture."

Mrs. Shopland, who attended for her husband, informed the magistrate that there was no internal communication with the house.

Mr. Ingham remarked that he could not patch up holes in an Act of Parliament, and said he was of opinion that the wall did not come within either of the classes mentioned.

Mr. Moseley argued that it came within the dwelling-house class because the premises were rated together.

Mr. Ingham replied that there must be an internal communication.

Mr. Moseley said he would place the case before the Metropolitan Board of Works for them to fight out.

Mr. Ingham commended Mr. Moseley for taking up the case, because a number of rubbishing houses were built in the metropolis without supervision; but he (Mr. Ingham) could not fill up omissions in an Act of Parliament.

The summons was adjourned for Mr. Moseley to communicate with the Metropolitan Board of Works.

If the district surveyor had not been taken by surprise, he would doubtless have pointed out to the magistrate Clause 8, in First Schedule, Part I., which provides that "all buildings, except public buildings, and . . . . buildings of the warehouse class, shall, as respects the thickness of their walls, be subject to the rules given for dwelling-houses."

**Visit of French Workmen to Philadelphia.**—The Municipality of Lyons is making preparations for sending twenty-eight delegates belonging to various working men's societies to the Philadelphia Exhibition.

### LEAD BURNING v. SOLDERING.

SINCE the fire that occurred at Canterbury Cathedral in 1872, the whole of the lead jointing and repairing upon the roof and in other parts of the Cathedral have been effected by an improved lead-burning machine, specially made by Messrs. Merryweather & Sons, of fire engine notoriety, London, for the purpose. The machine was seen in operation at Messrs. Merryweather & Son's works, at Lambeth, by Mr. Austin, the surveyor of Canterbury Cathedral, lining some large acid tanks with lead. The simplicity of the machine so satisfied him that one has been in operation since the date mentioned, upwards of 10,000 ft. on the Cathedral roof alone having been jointed, and this at a saving in cost of solder and time of about 250*l*.

## Miscellanea.

**Artists' Benevolent Fund.**—On Saturday, the 17th inst., the annual dinner in connexion with the Artists' Benevolent Fund was held in the Freemasons' Tavern, Sir William Fraser, M.P., presiding. The usual toasts were proposed in a very few words, the chairman believing, as he said, that the company would find a selection of music which he had made, more pleasing to listen to than anything he could say. Among those who responded to toasts were Captain Arkwright, R.N., Mr. George Godwin, Mr. Cave Thomas, and Mr. Mole. Replying to the toast of the evening, that of "Prosperity to the Artists' Benevolent Fund," Mr. Godwin remarked that while some artists were handsomely paid if they only threw a brushful of paint on a piece of canvas, there were many others whose position was far from enviable. This season, he could say, a great deal of distress existed among a certain class of artists. He had heard, even in quarters that would astonish them, of an entire absence of buyers, artists who had usually been able to dispose of their pictures having this year failed to do so. For these reasons he urged artists to avail themselves of the advantages of the fund. Mr. Cave Thomas, who replied for the Royal Academy, said it was not the fault of that institution, but of the leaders of the people, that it was not very different from what it was. Whatever its demerits might be, however, it had fostered art through long periods in which no general artistic feeling existed in this country. At the present time art was, perhaps, too much subject to the caprice of individuals, but when it was properly encouraged by our public men, and when the people were better educated, it would become of higher order. The secretary, Mr. Young, announced subscriptions to the amount of 823*l*. The fund consists of two distinct branches. One, called the annuity fund, is supported wholly by the contributions of its members for their own relief in sickness or old age; the other, which receives public subscriptions, is designed to relieve such of the widows and orphans of artists who have belonged to the annuity fund as are left in need.

**The Devouring Element.**—The telegrams of one day say that a large fire broke out at Moscow, on June 18, destroying over fifty houses. It is believed that the loss is enormous. Three-fourths of the whole town of Kadsahory, Caucasus, including the bazaar, were destroyed by fire on June 17. A conflagration of enormous dimensions broke out at St. John's, Quebec, on June 18, destroying almost the whole business portion of the town. Both sides of Richelieu-street and the east side of Champlain-street were burnt down in their entire length, including seven hotels, nine churches, the Custom-house, the Court-house, two banks, the woollen-mills, the docks, the bridge, and several vessels. Altogether about 200 stores and dwelling-houses are burnt down, and the destroyed district is one mile in length and 600 ft. in width. Several women perished in the flames. The damage done to property is estimated at a million and a half of dollars. It seems about time that people should set about reforming their mode of building.

**Munificent Bequests to Manchester Institutions.**—Mr. C. S. Beyer (of the firm of Beyer, Peacock, & Co.), whose death was announced a few days ago at Manchester, has left to Owens College his interest in the Gorton Locomotive Works, which is expected to realise from 100,000*l*. to 200,000*l*., and to the Manchester School and Infirmary, 10,000*l*. each.

**Sanitary Science at Cambridge University.**—We learn from Cambridge that in the Examination for Sanitary Science Certificates, the following have satisfied the examiners in Part I.:—C. H. Allfrey, M.D., B. Davies, M.D., K. M. Downie, M.D., H. Finch, M.R.C.S., A. S. Lethbridge, M.D., T. Moore, F.R.C.S., and J. B. Siddall, M.D. The following have satisfied the examiners in Part II.:—C. H. Allfrey, M.D., B. Davies, M.D., K. M. Downie, M.D., H. Finch, M.R.C.S., A. S. Lethbridge, M.D., T. Moore, F.R.C.S., J. B. Siddall, M.D., J. Simpson, M.D., A. Skeen, M.B., M.C., F. H. Spencer, M.B., M.C., and E. W. Symes, M.D. Examiners:—A. W. Barclay, M.D., George Buchanan, M.D., James Dewar, M.A., Arthur Ransome, M.D.

**Wood-working Machinery.**—Among the miscellaneous implements exhibited at the Bath and West of England Society's meeting, at Hereford, Messrs. F. W. Reynolds & Co.'s wood-working machinery attracted considerable attention. Messrs. Reynolds have made several improvements in their "Eureka" combined circular and band saw machine, and exhibited this machine in its improved form for the first time at the meeting in question. Several large wood-working machines were exhibited by this firm, and were shown at work, being driven by a new steam-engine, which Messrs. Reynolds exhibited as specially adapted for such purposes.

**Rendle's System of Glazing.**—When the King of the Belgians went to the Royal Aquarium, his Majesty was so much pleased with this new system of glazing, that he requested Mr. Rendle to send all the particulars to him at once to Claridge's Hotel, with a view to the introduction of the system into Belgium. During the visit the firemen of the building took out a large number of squares of glass in the great circular roof over the central promenade, and refixed them in a very few minutes in his presence, and the King was naturally astonished at the rapidity with which the whole was performed.

**American Institute of Architects.**—We have before us the published proceedings of the Ninth Annual Convention of the American Institute of Architects, held in Baltimore, Nov. 17, 18, and 19, 1875; Mr. A. J. Bloor being the editor, published by the Committee on Publications of the American Institute of Architects, 1876. It is for the most part a record of business done, the papers read being handed for publication to the *American Architect*, a weekly journal just now commenced.

**Art Galleries.**—At the last meeting of the Metropolitan Board of Works, the application of Sir Coutts Lindsay, bart., for the consent of the Board to the construction of a gallery of communication between the two art-galleries proposed to be erected in Grosvenor-mews, St. George's, Hanover-square, was granted conditionally.

**Honour to Architecture.**—At a recent meeting of the Council of King's College, London, the name of Professor Edward M. Barry, R.A., was brought forward as that of a former student, who had conferred honour on the College by his after-acquired distinction, and he was unanimously elected an Honorary Fellow of the College.

**The Dublin Carpenters.**—At a general meeting of the "Regular Carpenters," No. 2 body, Cork-hill, it was unanimously agreed that on and after Monday, the 19th of June, the wages of the members of their trade shall be 6s. per day, and 8d. per day extra three miles from the General Post Office.

**The Fratry, Carlisle.**—It is stated by the Carlisle papers that the complete restoration of this fine old building, in the Abbey, Carlisle, will shortly be begun, from plans prepared by Mr. Street, R.A., and approved by the Dean and Chapter.

**The Royal Academy Conversazione** is fixed for Friday the 30th inst.

## TENDERS

For repairs to Great Woodcote Farmhouse, and building six cottages. Mr. H. J. Newton, architect:—

| | |
|---|---|
| Hockley | £2,099 0 0 |
| Stewart | 1,893 0 0 |
| Shurmur | 1,800 0 0 |

For the erection of the Heath-street Schools, for the School Board of Dartford, Kent. Mr. W. H. Powell, architect. Quantities by Mr. Thomas Ladds:—

| | |
|---|---|
| Greive & Littlejohn | £3,779 0 0 |
| Sharp & Son (accepted) | 3,297 0 0 |
| Wallis & Clements | 3,093 0 0 |
| Croxford & Co. | 2,878 0 0 |

For the Tyne Steam Shipping Company's offices, Newcastle-upon-Tyne. Messrs. Austin, Johnson, & Hicks, architects:—

| | |
|---|---|
| Reed | £6,421 9 8 |
| Harbottle | 6,378 13 3 |
| Jackson | 6,110 0 0 |
| Elliot | 5,610 0 0 |
| Kyle | 5,360 0 0 |
| Simpson | 5,291 3 5 |
| Hudspith | 5,169 8 6 |
| Whichello (accepted) | 5,100 0 0 |
| Lee | 4,616 13 4 |
| T. & R. Lamb | 4,998 0 0 |

For the erection of new offices, for Messrs. H. & C. Collins, in Blagrave-street, Reading. Messrs. Wm. & J. T. Brown and F. W. Albury, architects:—

| | |
|---|---|
| Elliott (accepted) | £1,774 0 0 |

For additions to the premises of the Brighton and Hove Co-operative Supply Association. Mr. Lainson, architect:—

| | |
|---|---|
| Howard (accepted) | £949 10 0 |

For repairs to St. Peter's Church, De Beauvoir Town. Messrs. W. Waymouth & Son, architects:—

| | |
|---|---|
| Shurmur (accepted) | £485 0 0 |

For the erection of a new shed at Orchard Wharf, Blackwall, for Messrs. Hyatt, Devitt, & Parker. Mr. Edwin A. B. Crockett, architect. Quantities by Mr. D. Cubitt Nichols.

| | |
|---|---|
| Limn | £2,168 0 0 |
| Conder | 1,934 0 0 |
| Manley & Rogers | 1,904 0 0 |
| Outhwaite & Son (accepted) | 1,828 0 0 |

For the erection of a warehouse in Hermitage-street, Wapping, for Mr. J. D. McK. von Dadelszen. Mr. Edwin A. B. Crockett, architect. Quantities by Mr. D. Cubitt Nichols:—

| | |
|---|---|
| Outhwaite & Son (accepted) | £2,155 0 0 |

For alterations and additions to No. 1, Trafalgar-square, Fulham-road, for Mr. John Clark. Mr. Edwin A. B. Crockett, architect:—

| | |
|---|---|
| Outhwaite & Son (accepted) | £388 0 0 |

For building infirmary wards, board-room, medical officer's house, receiving wards, mortuary, and porter's lodge, at Newington Workhouse, for the Guardians of St. Saviour's Union, Surrey. Messrs. Henry Jarvis & Son, architects:—

| | |
|---|---|
| Joselyne | £23,500 0 0 |
| Coles | 23,409 0 0 |
| Colls & Son | 20,159 0 0 |
| Downs & Co. | 19,990 0 0 |
| Lawrance | 19,763 0 0 |
| Marsland | 19,625 0 0 |
| W. & F. Croaker | 19,476 0 0 |
| Shepherd | 19,450 0 0 |
| Tarrant & Son | 18,799 0 0 |
| Downs | 18,789 0 0 |

For the erection of Sheriff-hill schools, for the Gateshead School Board, to accommodate 450 children, exclusive of desks and benches, but including covered grounds, cementing to the yards, and boundary-walls, and palisading. Quantities by Mr. George Connel. Mr. Thomas Oliver, architect:—

| | |
|---|---|
| Gowens | £5,046 0 0 |
| Saul | 5,723 0 0 |
| English | 4,784 0 0 |
| Elliott | 4,600 0 0 |
| Tate & Lowes | 4,394 3 0½ |
| R. & J. Mitcheson | 4,390 17 0 |
| N. & R. Reed | 4,377 16 5 |
| Hutchinson & Southron | 3,960 0 0 |
| Burton | 3,948 18 0 |
| Greason & Stockdale (accepted) | 3,094 15 0 |

For the erection of Ashew-road schools, for the Gateshead School Board, to accommodate 850 children, exclusive of desks and benches, but including covered playgrounds, cementing to the yards, and boundary-walls, and palisading. Quantities by Mr. G. Connel. Mr. Thomas Oliver, architect:—

| | |
|---|---|
| Gibson | £8,176 7 6 |
| Glaisher | 8,149 5 0 |
| Ferguson | 7,860 10 0 |
| Elliott | 7,458 0 0 |
| Millar | 7,389 12 1 |
| N. & R. Reed | 7,349 12 1 |
| Southron | 7,249 13 0 |
| Greason & Stockdale | 7,232 4 10 |
| Mitcheson | 6,990 0 0 |
| Hutchinson | 6,864 6 10 |
| Reed | 6,854 0 0 |
| Harrison | 6,528 14 8 |
| Brick and Stone Co. | 6,503 4 10 |
| Smith | 6,485 10 0 |
| Lee (accepted) | 6,202 13 0 |

For rebuilding "Hogg" Tavern, Broadwall, Stamford-street. Messrs. Ingram & Hollands, architects:—

| | |
|---|---|
| Woods | £2,163 0 0 |
| Hobson | 2,098 0 0 |
| Stamp & Bowtle | 1,997 0 0 |
| Downs & Co. | 1,980 0 0 |
| Merritt & Ashby | 1,958 0 0 |
| Newman & Mann | 1,936 0 0 |

For new warehouses, 10 and 10½, Jewin-crescent, for Messrs. McBryde & Orr. Messrs. Ford & Hesketh, architects. Quantities supplied by Messrs. Franklin & Andrews:—

| | |
|---|---|
| Dove, Bros. | £8,625 0 0 |
| Hill, Higgs, & Hill | 8,434 0 0 |
| Shepherd | 8,073 0 0 |
| Newman & Mann | 7,915 0 0 |
| Adamson & Son | 7,898 0 0 |
| Rider | 7,895 0 0 |
| Downs & Co. | 7,880 0 0 |
| Hobson | 7,827 0 0 |
| Brass | 7,747 0 0 |
| Peto, Bros. | 7,516 0 0 |
| Ashby, Bros. | 7,475 0 0 |
| Browne & Robinson | 7,393 0 0 |

For alterations and fittings at No. 8, Bucklersbury, E.C. Mr. J. H. Rowley, architect:—

| | |
|---|---|
| Lascelles | £450 0 0 |
| Downs | 397 0 0 |
| Sage (accepted) | 383 0 0 |

For building the "Nag's Head" Public-house, Wandsworth. Mr. Young, architect. Quantities supplied:—

| | |
|---|---|
| Newman & Mann | £3,065 0 0 |
| Patman & Fotheringham | 2,976 0 0 |
| Axford | 2,875 0 0 |
| Macey | 2,715 0 0 |
| Parsons | 2,703 0 0 |

For contract No. 1 for foundations and underpinning adjoining walls on the site of No. 37, Walbrook, City, for Messrs. Parker & Wainwright. Mr. John Wimble, architect. Quantities supplied:—

| | |
|---|---|
| Croker | £6,280 0 0 |
| Ashby & Horner | 6,100 0 0 |
| Scrivener & White | 6,050 0 0 |
| Newman & Mann | 5,825 0 0 |
| Brass | 5,819 0 0 |
| Killby | 5,800 0 0 |
| Dove, Bros. | 5,720 0 0 |

For two villa residences at Hampstead, for Mr. Farquharson. Mr. T. Arnold, architect. Quantities supplied by Messrs. R. L. Curtis & Sons:—

| | |
|---|---|
| Merritt & Ashby | £4,525 0 0 |
| Williams & Son | 4,480 0 0 |
| Newman & Mann | 4,463 0 0 |
| Burford | 4,413 0 0 |
| Temple & Forster | 4,275 0 0 |
| Brass | 4,140 0 0 |
| Aitchison & Walker | 3,995 0 0 |
| Browne & Robinson (accepted) | 3,982 0 0 |

For warehouse on the Charterhouse Estate. Mr. R. Collier, architect. Quantities supplied by Mr. W. H. Barber:—

| | |
|---|---|
| Mark | £3,635 0 0 |
| Aitchison & Walker | 3,575 0 0 |
| Coleman | 3,489 0 0 |
| Stephenson | 3,456 0 0 |
| Moreland & Nixon | 3,395 0 0 |
| Scrivener & White | 3,365 0 0 |
| Newman & Mann | 3,325 0 0 |
| Hart | 3,316 0 0 |
| Laurence | 3,199 0 0 |

For dwelling-house, stable, and appurtenances, at Totteridge, Herts, for Dr. F. J. Wood. Messrs. Searle, Son, & Hayes, architects. Quantities supplied:—

| | |
|---|---|
| Newman & Mann | £5,505 0 0 |
| Sewell & Sons | 5,476 0 0 |
| Dove, Bros. | 5,295 0 0 |
| Williams & Son | 5,240 0 0 |
| Roberts | 4,724 0 0 |
| Woodhall | 4,420 0 0 |

For alterations and repairs to York-road Chapel, York-road, Lambeth. Messrs. Searle, Son, & Hayes, architects. Quantities supplied:—

| | |
|---|---|
| Brass | £3,365 0 0 |
| Sharpington & Cole | 3,193 0 0 |
| Newman & Mann | 3,146 0 0 |
| Tarrant & Sons | 3,015 0 0 |
| Dove, Bros. | 2,965 0 0 |
| Roberts | 2,947 0 0 |

For alterations and repairs at No. 116, Lower Thames-street, for Mr. E. Seaman. Mr. J. W. Forge, architect:—

| | |
|---|---|
| Newman & Mann | £331 0 0 |
| Brewer | 275 10 0 |
| Cleaver | 220 0 0 |

For villa residences, West-end-lane, Hampstead, for Mr. H. Smith. Mr. William Thompson, architect. Quantities supplied by Mr. Walter Burnett:—

| | |
|---|---|
| Burdett | £2,650 0 0 |
| Bangs & Co. | 2,285 0 0 |
| Scrivener & White | 2,237 0 0 |
| Newman & Mann | 2,200 0 0 |
| Kinnimont | 2,199 0 0 |
| Perry | 2,175 0 0 |
| Shaw | 2,145 0 0 |
| Boyce | 2,134 0 0 |
| Sheppard | 2,060 0 0 |

For completion of the mansion known as The Finches, Lindfield, Sussex, for Mr. James Proctor. Mr. Thomas Lainson, architect. Quantities supplied:—

| | |
|---|---|
| Anscombe | £12,535 0 0 |
| Newman & Mann | 12,461 0 0 |
| Barnes | 12,190 0 0 |
| Waldram & Co | 12,082 0 0 |
| Dove, Bros. | 12,008 0 0 |
| Howard | 11,974 0 0 |
| Merritt & Ashby | 11,967 0 0 |
| Browne & Robinson | 11,826 0 0 |
| Chappell | 11,783 0 0 |
| Cheeseman | 11,578 0 0 |
| Dollands | 10,425 0 0 |
| Deacon (accepted) | 10,225 0 0 |

For new premises, Newgate-street, for Mr. L. Salomons. Mr. J. E. Saunders, architect. Quantities supplied by Messrs. Osborne & Russell:—

| | |
|---|---|
| Gammon | £12,830 0 0 |
| Colls & Sons | 12,345 0 0 |
| Pritchard | 12,239 0 0 |
| Merritt & Ashby | 11,911 0 0 |
| Newman & Mann | 11,782 0 0 |
| Brass | 11,749 0 0 |
| Tarrant & Son | 11,594 0 0 |
| Ashby, Bros. | 11,471 0 0 |

For new warehouse, corner of Upper Thames-street and College-hill, for Mr. C. Oppenheimer. Mr. J. E. Saunders, architect. Quantities by Messrs. Osborne & Russell:—

| | |
|---|---|
| Tarrant | £11,009 0 0 |
| Carter | 10,171 0 0 |
| Conder | 10,850 0 0 |
| Colls | 10,733 0 0 |
| Newman & Mann | 10,630 0 0 |
| Brass | 10,585 0 0 |
| Merritt & Ashby | 10,555 0 0 |
| Ashby, Bros. | 10,473 0 0 |

For pulling down and rebuilding "The Lord Nelson," Whitechapel-road. Mr. R. C. James, architect:—

| | |
|---|---|
| Woods | £983 0 0 |
| Colls | 925 0 0 |
| Cook | 914 0 0 |
| Charlton | 897 0 0 |
| Fisher | 895 0 0 |
| Young | 657 0 0 |

For Bradford Drainage, Wilts, contract No. 2. Mr. A. W. Estridge, engineer. Quantities supplied:—

| | |
|---|---|
| Botterill & Co. | £3,770 0 0 |
| Haynes | 3,000 0 0 |
| Brock & Bruce | 2,626 0 0 |
| Bugbird | 2,600 0 0 |
| Cowdery & Sons | 2,274 17 7 |
| J. & G. Bell | 2,145 0 0 |
| Long | 1,650 0 0 |
| Croxford & Co. | 1,629 0 0 |
| Everest | 1,623 8 4 |
| Coker | 1,275 0 0 |
| Sibsey | 1,210 0 0 |

For Midsomer Water Drainage. Mr. A. W. Estridge, engineer. Quantities supplied:—

| | |
|---|---|
| Bissett | £6,045 0 0 |
| Bugbird | 4,765 0 0 |
| J. & G. Bell | 4,526 10 0 |
| Young & Co. | 4,479 15 0 |
| Brock & Bruce (accepted) | 3,900 0 0 |
| Greenwood & Co. | 3,584 0 0 |
| Coker | 3,275 0 0 |
| Sibsey | 2,600 0 0 |

For works at West Ham Cemetery. Messrs. N. S. Josephs & Pearson, architects:—

| | |
|---|---|
| Newman & Mann | £998 0 0 |
| Browne & Robinson | 997 0 0 |
| Bangs & Co. | 989 0 0 |
| Rivett | 977 0 0 |
| Scrivener & White | 951 0 0 |

For foundations for house, No. 25, Devonshire-terrace, for Mr. Beddington. Messrs. N. S. Josephs & Pearson, architects:—

| | |
|---|---|
| Browne & Robinson | £1,068 0 0 |
| Scrivener & White | 897 0 0 |
| Newman & Mann (accepted) | 790 0 0 |

For alterations and additions at Thorncombes, near Guilford, for Mr. Edward Fisher. Mr. Sancton Wood, architect. Quantities by Messrs. Mann & Saunders:—

| | |
|---|---|
| Newman & Mann | £2,948 0 0 |
| Colls & Son | 2,841 0 0 |
| Stimpson | 2,650 0 0 |
| Fish | 2,360 0 0 |

For the erection of the Gresham Life Assurance Offices, Poultry, City. Mr. J. J. Cole, architect. Quantities by Mr. James Barnet:—

| | |
|---|---|
| Scrivener & White | £47,980 0 0 |
| Trollope & Son | 47,900 0 0 |
| Smith & Co. | 47,713 0 0 |
| Dove, Bros. | 47,255 0 0 |
| Colls & Sons | 46,434 0 0 |
| Hill, Higgs, & Hill | 43,680 0 0 |
| Killby | 40,730 0 0 |
| Peto, Bros. | 40,497 0 0 |

For a new house, Grove Park, near Chislehurst, Kent, for Mr. D. Macartney. Mr. E. Mathews, architect. Quantities by Mr. R. C. Gleed:—

| | |
|---|---|
| Harrison & Wood | £2,974 0 0 |
| Veers | 2,877 0 0 |
| Ebbs & Sons | 2,640 0 0 |

For the erection of new schools, Church-road, Leyton, for the Leyton School Board. Mr. J. T. Newman, architect. Quantities supplied by Messrs. R. L. Curtis & Sons:—

| | |
|---|---|
| Reed | £4,894 0 0 |
| Arber | 4,880 0 0 |
| Rivett | 4,787 0 0 |
| Hoskings, Bros. | 4,627 0 0 |
| Ashby, Bros. | 4,469 0 0 |
| Atherton & Latta | 4,350 0 0 |
| Morter | 4,242 0 0 |
| Sayers (accepted) | 4,114 0 0 |

For taking down and rebuilding Nos. 17 and 18, Devonshire-street, for Messrs. Brown & Norton. Mr. W. S. R. Payne, architect. Quantities by Mr. Edward Morfee:—

| | |
|---|---|
| Kiddle & Son | £4,290 0 0 |
| Ashby, Bros. | 4,225 0 0 |
| Conder | 4,184 0 0 |
| Outhwaite & Son | 4,053 0 0 |
| Holland & Hannen | 4,031 0 0 |
| Lathey, Bros. | 4,030 0 0 |
| Tarrant & Son | 3,953 0 0 |
| Laurence | 3,885 0 0 |

For alterations to the "Two Brothers" Tavern, New-road, Battersea. Mr. F. Edwards, architect:—

| | |
|---|---|
| Gammon & Son | £347 10 0 |
| Marsland | 311 0 0 |
| Lathey, Bros. (accepted) | 307 0 0 |

For Premises in Throgmorton-avenue, City, for Mr. A. J. Waterlow:—

| | |
|---|---|
| Hill, Higgs, & Hill | £15,700 0 0 |
| Baker & Sons | 15,460 0 0 |
| Jackson & Shaw | 15,273 0 0 |
| Lascelles | 14,983 0 0 |
| Trollope & Sons | 14,973 0 0 |
| Lucas, Bros. | 14,922 0 0 |
| Holland & Hannen | 14,784 0 0 |
| Chappell & Co. | 14,567 0 0 |
| Adamson & Son | 14,490 0 0 |
| Peto, Bros. | 14,275 0 0 |
| Brass | 13,987 0 0 |

For a house at Woodside, near Croydon, for Mr. James A. Wright. Mr. John Pemey, architect:—

| | |
|---|---|
| Coles | £2,028 0 0 |
| Hyde | 1,995 0 0 |
| Cox | 1,985 0 0 |
| Marriage | 1,810 0 0 |
| Smith (accepted) | 1,906 0 0 |

For new premises for the Civil Service Co-operative Society, Oxenden-street, Haymarket. Mr. Thos. Verity, architect; Mr. Ed. Robins, surveyor. Quantities by Mr. W. S. Plimsaul:—

| | |
|---|---|
| Hobson | £11,069 0 0 |
| Howard | 10,784 0 0 |
| Simpson | 10,500 0 0 |
| Kirk & Randall (accepted) | 9,824 0 0 |
| *Iron and Fireproof Flooring.* | |
| Dennett & Co. (accepted) | 4,985 0 0 |

For alteration and additions at the residence of Mr. Thomas H. Chubb, at Malmsbury, Wilts. Mr. John Berney, architect:—

| | |
|---|---|
| Brown (accepted) | £780 0 0 |

For alterations and additions to the Rectory House at Ardingley, Sussex, for the Rev. James Bowden. Mr. John Berney, architect:—

| | |
|---|---|
| Box (withdrawn) | £3,788 0 0 |
| Smith (accepted) | 4,044 0 0 |

For new mansion, at Sevenoaks, for Mr. A. Druce. Mr. J. M. Hooker, architect. Quantities by Mr. T. Ladds:—

| | Red Mansfield Stone. |
|---|---|
| Smith & Co. | £12,210 ..... £340 |
| Jackson & Shaw | 12,219 ..... 335 |
| Brass | 11,864 ..... 354 |
| Longmire & Burge | 11,749 ..... 329 |
| Trollope & Sons | 11,676 ..... 349 |

For repairs to "The Trafalgar," Latimer-road, Shepherd's Bush. Mr. H. J. Newton, architect:—

| | |
|---|---|
| Wells | £130 0 0 |
| Hockley | 109 0 0 |
| Shurmur | 99 0 0 |
| Bowden | 96 0 0 |

For repairs to "The Queen," Neate-street, Camberwell. Mr. H. J. Newton, architect:—

| | |
|---|---|
| Shurmer | £117 0 0 |
| Smith | 109 0 0 |
| Hockley | 107 0 0 |

## TO CORRESPONDENTS.

*Peebles v. Thompson.*—The plaintiff's solicitors, Messrs. Crook & Smith, have evidently not read the report in our columns or they would not have written such a stupid letter.

*Improved Dwellings.*—We have received a communication upon this subject from Messrs. Allen & Son, but it was too late for consideration this week.

*Errata.*—In Mr. Gatliff's paper (p. 579, *ante*) read in lieu of what is printed, "I wish to call the attention of this meeting, as bearing materially upon the question before it, viz., 1st, the effect of the land or ground-rent as compared with the cost of the superstructure; and," &c.

*Newcastle-under-Lyme Surveyorship.*—In the list of selected candidates for the above in last Saturday's *Builder* you give the name amongst others of Mr. Pearce, Liverpool, whereas it should have been Mr. J. B. McCallum, Liverpool.—J.

Ibex (we are forced to decline. Look to the schedule of charges issued by the Royal Institute of British Architects).—W. A.—F. H.—H. & W.—J. B.—Sir G. G. S.—A. W. E.—H. J.—A. & Son.—W. C. G.—B. B. & B.—A Subscriber.—W. P.—J. H. B.—G. & S. F.

We are compelled to decline pointing out books and givin addresses.

All statements of facts, lists of tenders, &c. must be accompanied by the name and address of the sender, not necessarily for publication.

NOTE.—The responsibility of signed articles, and papers read at public meetings, rests, of course, with the authors.

*The Publisher cannot be responsible for* TESTIMONIALS *left at the Office in reply to Advertisements, and strongly recommends that* COPIES ONLY *should be sent.*

*Advertisements cannot be received for the current week's issue later than* **THREE** o'clock p.m. *on THURSDAY.*

CHARGES FOR "WANTED" ADVERTISEMENTS.

SITUATIONS VACANT.

Six lines (about fifty words) or under ..... 4s. 6d.
Each additional line (about ten words) ..... 0s. 6d.

SITUATIONS WANTED.

FOUR Lines (about THIRTY words) or under .. 2s. 6d.
Each additional line (about ten words) ..... 0s. 6d.

PRE-PAYMENT IS ABSOLUTELY NECESSARY.

TERMS OF SUBSCRIPTION.

"THE BUILDER" is supplied *direct* from the Office, to residents in any part of the United Kingdom at the rate of 19s. per annum, *Payable in Advance.*

Halfpenny stamps accepted for amounts under 5s. Any larger sum should be remitted by Money Order, payable at the Post Office, King-street, Covent-garden, W.C. to DOUGLAS FOURDRINIER.

**Bath Stone of best quality.**
**RANDELL, SAUNDERS, & CO. (Limited),**
Quarrymen and Stone Merchants.
List of Prices at the Quarries and Depôts; also cost of transit to any part of the Kingdom, on application to
Bath Stone Office, Corsham, Wilts. [ADVT.]

**Patent Selenitic Cement,** with double the usual sand, is much stronger than ordinary mortar. Plastering finished in much less time at less cost. Excellent substitute for Portland cement for Concrete at less than half its price.—1, Great College-street, S.W. [ADVT.]

**Asphalte.**
Seyssel, Patent Metallic Lava and White Asphaltes.
**M. STODART & CO.**
Office:
No. 90, Cannon-street, E.C. [ADVT.]